

Peace Farms: Sustainable Organic Food Business Development

by

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A Major Project Report

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Abstract



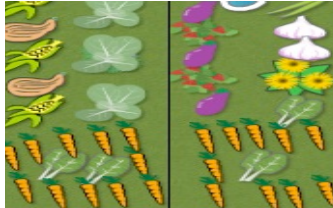
This is a report on sustainable organic food business development. It uses expert research in crop planning and business strategizing for the Peace Farms project aimed at growing organic food in Toronto at affordable prices. This is about entrepreneurship and food security in the city of Toronto.

Foreword

The Peace Farms Project was a two-year MES research project on growing food justice and responding to hunger. By using research on crop planning and business strategizing Peace Farms researched growing more and selling more for less. The project report includes funding opportunities from NGOs, sales and profit motives, ethical advertising and food subsidizing. It is a brief introduction into the world of food business and it also discusses some real unforeseen problems such as seed failures and market monopolization by competitors. The 2016 report will lead the strategic methods in 2017 to remove errors, difficulties and utilize peaceful and equal methods of expanding an organic food business.

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Introduction



This introduction recaps Peace Farms Project in its inception in 2015 and presents data from its 2016 performances. This report focuses on some of the activities required to start the project using expert techniques from the business strategy side first and then the crop planning. This is a growing project with a fresh new website www.peacefarms.ca and a food club in the making. Guiding growth with past experiences, I research areas that Peace Farms lacked in 2015 and tried to implement those solutions in 2016. Since there are always errors until that perfect market storm, growing food research is tricky. Some say it is better to not predict outcomes and just go with the flow; others like the investors think predictions come in handy. Daily routines prepare plants for maturity unless some unforeseen misfortune should come in – and in such cases I hope it is as easy to solve as watering a dry plant. The following chapters expand Peace Farms’ empirical research on two particular topics of interest: business strategy and crop planning. The result is what happens as a student tries to run an organic food business while being a student at the Masters level of education in the Faculty of Environmental Studies at York University 2015-2016. The pictures that are on their own have been created with Garden Planner software, Windows Paint, and Excel. They are meant to collaborate with my story.

Peace Farms Report 2015-2016.

This research paper is a mixture of activities and research on Peace Farms spreading from 2015 to 2016. There are 3 parts to this report: Business Strategy, Crop Planning and Peace Farms 2016 report. It was encouraged and based on the 2015 performance of Peace Farms in its infancy and with dreams to expand in the community and Toronto at large. Following an undergraduate degree and student unemployment, I enrolled in post-secondary education to complete my

Masters in food security. I mimicked the works of Anan Lololi and the African Food Basket and created a business called Peace Farms to tackle my student problems, which were unemployment and hunger. The basic idea behind this project was to gather the techniques and methods of growing food, and employing myself. The project also relied on research and mentoring to expand profits and advertisement in order to make my business feasible and exemplary. If a business cannot make sales then they cannot compete in a capitalist world and that is why this research is crucial to support self-entrepreneurship and food security in Toronto, Canada. The two-year degree in the Masters of Environmental Studies showcased foraging, crop planning, travelling, selling and marketing. The structure of the report is a mixture of three different reports: a Business Plan; a Crop Plan; and the Peace Farms project.

In the Business Strategy section, I used academic resources to address errors done in 2015 and address tasks in 2016 such as seeds problems and monopolization of market by bigger companies. The story follows activities in Toronto farming, competition and relocation. We shall encounter mission statements and visions to better direct Peace Farms to meet its goals. Each year brings its own issues and a good business strategy can help one stay strong and fruitful. The goal and vision was to expand the opportunities in farming urban space organically for business growth and low income family access to food. Overall goal was to expand and create opportunities for others in the low income communities including my current residence of Lawrence Heights Community Center aka Jungle. It includes examples from Peace Farms activities. This chapter examines business cycles and growth strategies. I used examples of management from McGukin (2001), Sugars (2006), Kennedy (2015), Gerber (2010) and Fox (2004). In this chapter I learned what to expect as a student business growing organic food and profits to sustain living conditions in Toronto. Well prepared I studied this topic and continue to sell out at the markets this year 2016.

The second chapter on Crop Planning covers plant science and nurturing of crops that we eat. It has seed experiments, including travelling to Jamaica to purchase seeds. I also discuss the plots where the farming and gardening took place across the city. There are three plots and they are located at Black Creek Community Farm near Jane and Finch, Maloca Community Garden on the York Keele Campus, and Lawrence Heights Community Center. I used past experiences in urban organic farming working with Black Creek Community Farm and African Food Basket in 2015. In 2016, I combined that experience with new thoughts from world renowned authors

such as Eliot Coleman (2008), Nancy Bubel (1988) and Frank Tozer (2009). Through books like these I designed my 2016 crops, which I sold using my business strategy. The crop plan demonstrates how to meet the inventory needs of the business plan.

Peace Farms Activities 2016 is the last chapter of the project report and focuses on growing and selling. In the future flowers will be a main part of pricing and Peace Farms. It is chronologically structured featuring subchapters and has awesome pictures of places, food and markets. This is also where the ingredients from the business strategy and crop planning materialize in the new world. I rescue issues that are almost certain to happen in the real world with advice from multiple sources. For example, relocating to a low income community impacted the cash flow and customer acquisition. It starts off in October and ends in May, where I use Damian Adjodha, course director in Agroecology, and author of *Grow Your Own Seeds* Bubel's (1988) lessons practiced in the year 2015, but based in older solutions in human survival and entrepreneurship. I construct a green bin greenhouse in my basement apartment to grow transplants for Canada's post-frost date May 24 2016. From December until February I use advertising books by Cortese (1999) Twitchell (1996), and Driver (2007) to capture new customers online. There are described issues of the market and seed experiment results. In March I illustrated these flyers on the www.peacefarms.ca website, the Peace Farms Facebook page www.facebook.com/peacefarms, Twitter Account TdotPeaceFarms, including Shopify and etc. Until May I was a website engineer corresponding with potential customers in the summer, as well as developing the potential 2016 crop plan and marketing scheme or business strategy. From June to August 2016 I was busy sowing seeds, cultivating, as well as marketing and completing courses. September-October concludes the report with market reports, crop science, and year two statistics.

1. BUSINESS STRATEGY



Introduction

Adding onto 2015 data, performance books gathered to guide the new season in the market were many, among others McGukin (2001), Sugars (2006), Kennedy (2015), Gerber (2010) and Fox (2004). I looked at customer acquisition, pricing, inventory storing and other key concepts. I have also cross referenced real Peace Farms activities to collaborate with the findings from the books. Unforeseen interactions with competitors that cause problems for Peace Farms will also be discussed. Advertising materials to support the war on hunger through research and design flyers and concepts, such as Cortese (1999) Twitchell (1996), and Driver (2007) were used to advertise and price my organic produce in 2016.

So you want to start your own business and live richly, well you will have to decide what, why, when, where, and who it is for first. You need a business strategy or plan if you want to make more money permanently. Since this study is focusing on profiteering we can look at a business strategy like the coach's winning plays drawn on the boards. Frank McGukin (2001: 6) argues that a "business is all about service. Because you are your business, you are responsible for finding and keeping customers. People expect service these days, and if you don't give it, your competitors will." In the beginning you need to understand your business and its missions and visions. The business class in 2015 helped me gather and focus thoughts and energies. Below is a business description of Peace Farms, 2015.

Mission Statement

Peace Farms aims to:

1. Educate communities about switching to natural food diets through social media and arts;
2. Create future employment, community markets and share community resources through stories and friendship;
3. Utilize private and public spaces to grow organic food and healthy communities in Toronto, Canada.

Vision Statement

The major milestones for peace Farms are:

1. To rent a greenhouse space from Black Creek Community Farm to grow all year;
2. To secure at least 2 acres of land from Farm Start;
3. To gather 100+ Customer Shared Agriculture members in year 2;
4. To equip 5 bicycles to grow and sell organic vegetables;
5. To create a YouTube page with uploaded farming and marketing events;
6. To create educational pamphlets, stories, T-shirts and music to create awareness;
7. To create a low income community waste program in year 2.

Business Description

Peace Farms is an organic farm business growing and selling organic crops in the Greater Toronto Area. Peace Farms grows three types of products:

1. Flowers used for decorations, natural sugars, therapy, medicine and consumption;
2. Vegetables and fruits;
3. Medicinal Plants such as peppermint cane used for tea to treat colds, ginger for toothaches, and dill to help with stomach pains like gas and cramps.

Business can make other people's lives matter and be easier. However, there are risks that can affect them personally as well financially. Below is a compilation of some errors in creating a business that strategists warn against. I have shortened McGukin's (2001: 7) top mistakes in growing a business as follows:

- No growth plan;
- Wrong business, wrong location;

- Lack of technical skills;
- Lack of sales and marketing skills.

McGukin's (2001) lists 10 common mistakes but the world is very big and without caution there can be a plethora of mistakes that might even lead to lawsuits and bankruptcy (two very common things in business). But let us assume that you evade these hidden dangers because you read McGukin's list, which means that you are ready for the service, product or inventory. Inventory is commodity; inventory is a key factor to cash-flow. If it's too large or not turning, cash-flow is seriously reduced. Here are the secrets to efficiently managing inventory, according to McGukin (2001: 81):

- Prudent purchasing;
- Avoiding overstocking;
- Efficient stock control systems;
- Regular inventory turnaround;
- Minimal damages and wastage;
- Correct inventory costing at year-end;
- Close monitoring of theft;
- Regular checks of actual to theoretical inventory stocks.

Imagine if you stacked your closet with classic comic books for sale, minimal damages or wastage can occur such as rats or water could destroy your inventory and affect pricing. A finer way to view inventory is to look at it like it was that service that customers claim from you continuously. Taking care of inventories is taking care of the customers purchase. If you are a farmer, bad seeds mean your inventory or finished product will be unavailable. But should you securely produce or purchase your inventory then you can begin selling it. Pretend you have transported your goods, or inventory to the market, you can now begin marketing and to help you understand this phase we shall define some terms used in the business world. Let's begin here: what is a Profit? Gross profit on a product sold or on a service rendered is computed as the money you brought in from the sale, less the cost of the goods sold. Net profit is your gross profit less taxes and interest. Net profit is the same thing as earnings or net income. For

example, the gross profit is the mark-up or what you get when you deduct cost of production from total sold. The net profit is this remainder or gross profit before taxes and interest.

While gross profit is expressed in a dollar amount, your profit margin is a percentage, computed as follows: gross profit divided by sales equals gross profit margin.

Knowing your mark-up is critical to understand your profitability. Like your gross profit margin, your mark-up is also expressed as a percentage: sales price minus cost to produce divided by cost to produce.

There are three ways for you to improve your profits. First, you can sell more. Second, you can increase your prices. Third, you can reduce your overhead (McGukin, 2001). To increase profits, expert business strategists use the above definitions to navigate through their planning stages.

Now that we have seen some of the themes within the profiteering objectivity, let us discuss the market place or the marketing and customer acquisitions that make the planning of business move profitably. “While reading is great, nothing beats actually talking with people associated with your potential business. There are two groups of people you need to meet and interview: 1. Potential customers. 2. The competition.” (Strauss, 2005: 36). Usually, it is best to do this before starting a business, if you are lucky customers may urge you to begin a business to suit a need or address a service in which case you will create a happier salespeople. McGukin (2001: 6) recommends to “[m]ake all Customers VSPs. Your best cost-free advertising is good word-of-mouth referral. Customers make you money, build your business and pay your bills. This makes them VSPs, Very Special People. Treat each one as if they were your only client, they will refer others to you. Rules to keep your customers happy: 1. The customer is always right. 2. The customer is always right. 3. The customers is always right. “

With that in mind, a business must strongly develop their products to be efficient so that they receive less complaints and prosper. Some negative exposures have been salmonella poisoning and fish mercury levels in the food industry, or even oil spills by large companies etc. There is a lot of secrecy in business regarding labeling for customers as people will refrain from a bad service and go for better services elsewhere. Perhaps in the years it takes to make a fortune companies can learn how to better equip each other to service society safely and profitably. What we have learned so far is that the customer is the number one most important doctrine and all businesses follow their customers. For profits customers may be asked to pay more, buy more or

buy the same produce but grown or produced differently to keep overheads down (mark-ups). It is normal for mistakes to occur in business (i.e. dilemma with keeping the receipts), which is why some recommend using a checklist as provided above to minimize the mistakes.

Business Life Cycle

It doesn't take a year or two to make \$3000 or a million dollars, even for lottery winners it takes many years to strike it rich. I am going to use an example of a business start-up cost and other charted examples to explain growth. The chart below (see Table 1) exemplifies a start-up cost of a farm company in Quebec, Canada and it is important to understand 3 things: 1. The potential debt incurred in the starting of the business; 2. How to prepare a start-up cost sheet so that you are not lost; and 3. Cost effective pricing example (or why you should mark-up).

Table 1: Sample Budget for a Start-up Farm (Fortier, 2012: 107).

	BRUCE & HANNA	
	\$	%
INCOME	\$22,000	100%
CSA Baskets	\$12,000	
Farmers Market	\$10,000	
EXPENSES	\$10,835	49%
Fixed Costs		
Administration	\$1,490	7%
Insurance	\$500	2%
Land and buildings	\$1,900	9%
Financial and Other	\$1,270	6%
Operating Expense		
Supplies	\$1,650	8%
Greenhouse	\$1,250	6%
Field Operations	\$725	3%
Marketing	\$650	3%
Vehicle	\$800	4%
Other	\$600	3%

The saying is that you should love what you do, not love what you think. In business, money is the motive for many but not without caution according to some. According to Mohr (2008: 11) in "Lessons from: Focusing on Profiteering Respectfully": "It's not always about the money. Now that we've discussed why you should be extremely careful in trying to make your hobby your business, it's important to make the point that you can still have a hobby." The intensity involved in running a business can include the tunnel visioning of profiteering, which does give

business owners a bad name as being callous for example. These negative attributes of running a corporation focused on the profit margin are well demonstrated in Michael Achbar and Jennifer Abbott (2003) film, *The Corporation*. Companies (such as Monsanto and pharmaceutical corporations) become big enough to impact food security on the political level. We are establishing ground rules on growing as a business to tackle climate justice and accessibility in the food security. At what stage of the life cycle is your business? Is it a new business, with leaping revenues and no cash? Or is it more stable, with a predictable market demand? How can a business benefit from past experiences of others? As Mohr (2008: 116) states, “Knowing your business’s place in the life cycle indicates a lot about what to expect in the coming years.”

Mohr’s (2008) checklist on the life cycle of a business includes:

1. I know which life cycle stage my business is in;
2. I have projected my business’s growth rate using the life cycle information;
3. I have planned how to prolong the maturity phase of my business.

The list above helps in the oversight and temporal understanding of growth expectations and risks to come. In 2015, I developed a forecast chart to know what the future will be like given certain sales value. In Toronto, there are 4 seasons and 4 business quarters or cycles in a year. Within these seasons or quarters, companies make sales and spend money on advertising to extend their profits. Let us now consider how some think of acquiring customers and then we shall move on to talk about sales, pricing and profits to grow business.

Table 2: Peace Farms Sales Forecasts

PEACE URBAN FARMS Monthly Sales Forecasts													
Flowers													
	May	June	July	August	September	October	November	December	January	February	March	April	Total
# Units Sold	200	200	200	200	200	200	200	200	200	200	200	200	2,400
Price per Unit	\$40	\$40	\$40	\$40	\$40	\$40	\$40	\$40	\$40	\$40	\$40	\$40	\$40
# 1 Monthly Sales \$	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$96,000
Medicinal Plants													
	May	June	July	August	September	October	November	December	January	February	March	April	Total
# Units Sold	204	205	206	207	208	210	200	200	200	201	202	203	2,446
Price per Unit	\$5	\$5	\$5	\$5	\$5	\$5	\$5	\$5	\$5	\$5	\$5	\$5	\$5
# 2 Monthly Sales \$	\$1,020	\$1,025	\$1,030	\$1,035	\$1,040	\$1,050	\$1,000	\$1,000	\$1,000	\$1,005	\$1,010	\$1,015	\$12,230
Fruits & Vegetables													
	May	June	July	August	September	October	November	December	January	February	March	April	Total
# Units Sold	250	250	250	250	250	250	250	250	200	300	300	250	3,050
Price per Unit	\$5	\$5	\$5	\$5	\$5	\$5	\$5	\$5	\$5	\$5	\$5	\$5	\$5
# 3 Monthly Sales \$	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$1,000	\$1,500	\$1,500	\$1,250	\$15,250
Total Sales \$	\$10,270	\$10,275	\$10,280	\$10,285	\$10,290	\$10,300	\$10,250	\$10,250	\$10,000	\$10,505	\$10,510	\$10,265	\$123,480

We will now consider some findings from the market research to help us understand profiteering. The following statistics were gathered in 2015 by Peace Farms through the LEF business program and personal information of the sample participants cannot be revealed. This approach is known in the business field as market targeting or sometimes prospecting. This is done in order to find customers or the VSP- Very Special People. Remember they are the lifeline

of business because they give you their hard earned monies through sales. In acquiring customers the deal has been to specify the ages of customers, transportation, location, the size of their consumption capacities for example (McGukin, 2001). Below is the customer information collected for Peace Farms to identify its customers. This was first instructed in the LEF Learning Enrichment Foundation (www.lefca.org) to help install business skills in me in 2015.

Table 3: Customer Profile

Demographics	
Age	22
Income	\$15,000/year
Marital/Family status	Single
Ethnicity	Ghanaian
Language(s)	Twi, English
Gender	Female
Education	Bachelor of Science
Other	Read
Geographic	
Location	Wilcox Street
Other	
Psychographics	
Lifestyle descriptors	Young Adult
Hobbies/interests	Shopping and Chilling
Political, religious etc.	Christian, Liberal
Music Preferences	Azonto and RnB

The provided list from market targeting allows for businesses to see customers and their desires so that they can set volume and quality of produce for sales. It is easier to do this before selling because this way is more secure and does not guess and use luck to make sales. This also helps in the advertising of the market as some markets will find more minorities or less with different socio-economic and psychological preferences (Cortese, 1999). Identity and presentation are unique to cultures and even genders as perception differentiate vastly between social classes and consumption. The big question still remains unanswered: how do you reach these consumers now that you know who and where they are? It is recommended to wear the consumer's shoes. Identify the marketing techniques that you have responded to as a consumer. Note the ones that persuaded you to purchase a product or use a service. Would any of these

methods work for you? How can you apply them to your business? (McGukin, 2001).

Continuing in the service delivery stream business owners try to understand the product in relation to the customers. But now they must also pretend to be the customers in order to figure out how to best attract sales in consumerism. Once you figure this out you can consume money from the market through sales to allow yourself to profit. The All Nations Church this year bought \$128 worth of organic food through referral. Thus in 2016, I was fortunate to get older customers refer me to new customers.

To recap, the markets are still random and fishy but some believe customers are just like the producers and it is just a matter of knowing. Demographics showed us who and how customers are geared towards their shopping habits by biology and culture. Customers feed the profit stream therefore, taking care of them should be your number one goal. Overall, business takes time and strength to sustain and it can also cost a lot of money to start.

Pricing And Selling

Below are two different pricing charts of Peace Farms Year 1 to demonstrate some of the ways TO think of growing wealth.

Table 4: Peace Farms Year One Business Training (inventory and pricing)

Product	Price \$
Flowers	40
Vegetables	5
Medicinal Plants	5

In this example, I price food and flowers differently because people spend more money on flowers than they do on food, for example weddings and grocery bills. The next graph shows an accumulation of sales using the pricing index above such as \$40 and \$5 for food and flowers over a 12 month season.

In Table 5: Break Even Analysis Calculations (2015) explains cost of production and prices to even out financial investment. Total revenue is how much money you acquired selling flowers; this revenue is 78% of all the stuff you sell. Fixed costs is how much money you provided to

produce the flowers. Unit price is the cost of a flower sold. Unit variable costs are how low the pricing can go. Contribution margin is the difference between unit pricing and unit v. cost # units required to break even means how many flowers need to be sold to make a profit.

Table 5: Break Even Analysis Calculations (2015)

PEACE URBAN FARMS Break Even Analysis Calculations							
	Total	% of Total	Fixed Costs	Unit	Unit	Contribution	# Units Required
	Revenue	Revenue	Allocated	Price	V. Cost	Margin	to Break Even
Flowers	96,000	78%	\$22,126	40	5	35	632
Medicinal Plants	12,230	10%	\$2,819	5	3	2	1409
Fruits & Vegetables	15,250	12%	\$3,515	5	3	2	1757
Total	123,480	100%	\$28,459				

This process was learned in Year 1 of operating a business and it was quite intense to grasp the business strategy. After completion of the business certificate, I created the website www.peacefarms.ca to advertise my produces. But we shall talk more of that in the year 2 of Peace Farms Project later in the report. Right now we shall dive into the growth strategies ,which means expert advising from researchers on how to make the break even analysis (and your business) a growing success story.

Your price should be at a level sufficient to reimburse you for the cost of the goods or services sold, cover your overhead costs, and provide a profit. The amount of profit you receive will be dependent on your gross margin, or mark-up (Kishel and Kishel, 2005). These lessons help to control growth of success or profits in a business. This is the ingenuity of the cost and the selling price of the goods sold. The higher the mark-up, the greater your profit per sale (thus the higher your added cost). However, this doesn't necessarily mean that your overall profits will be higher. Why? Because higher mark-ups usually result in reduced sales. This explains why discounts are able to make healthy profits despite lower-than-average mark-ups. For example, Peace Farms encountered African Food Basket competitively in the market this year over pricing of goods. Where I charged \$3 they charged \$5 and since we shared a booth at the farmers

markets I was disallowed to attend the market under their tent. Peace Farms prices favor quality for customers when African Food Basket tries to raise profits by charging more.

What this means is that your added cost, which is also called the mark-up, tallies up to give you the overall profit made from sales. So for example, if a broccoli cost me \$10 to make and I charge you \$15 the mark up is \$5. If I have to transport that broccoli from Mexico it might cost you more. Kishel and Kishel (2005) believe that those who charge less usually are able to produce the broccoli for less. Nevertheless, we can think of sentimental or transport values and what it costs to give it away to others. The cost to you for producing an inventory or service is what the mark-up should reflect. There are various reasons to raise profits and there are many ways to do so. Market monopolization by African Food Basket included raising the prices of food and selling more than Peace Farms. This practice is common in the business world and the act of pricing has been broken down to three methods. Now, let us ground ourselves in understanding how prices come about. According to Kishel and Kishel (2005), there are three types of pricing methods: 1. Competitive Pricing; 2. Standard Mark-up Pricing; and 3. Cost-Oriented Pricing.

You can already tell which pricing method went on between the market competitors this year, focusing on Black Creek, Peace Farms, and African Food Basket interactions.

Competitive pricing is based on competition between the competitors for customer value. For example if Peace Farms is selling broccoli for \$3 and Black Creek Community Farm decides to sell broccoli to the same customers for \$2, that is competitive pricing. When I lost my informal contract with Vegan Restaurant on Weston Road and Denarda Street this year it was because Black Creek had offered them cheaper and more food convincing them to switch contracts. Standard mark-up pricing is generally a common pricing method where all competitors charge you the same price. This is possible because of the cost of resources or production or sometimes government subsidized programs or they form associations and trade unions to work together to deliver services. The third and final pricing method is based solely on how much it costs a company to produce the broccoli for example. The Market Gardener reveals pricing techniques of some older farmers and I have produced some of their reasons for their pricing scheme: Only the tastiest cultivar are sold; fresh foods and no refrigerated crops, focus placed on quality and freshness of vegetables (Fortier, 2012). Accordingly I can also raise prices if my food is fresh and excellent. However prices and ethics correspond with space and poverty. Let us

quickly compare these two wards from information gathered in 2015 to help Peace Farms function (see Tables 6 and 7).

Table 6: Ward 8 Jane and Finch (Driftwood Market)

Life indicators in 2010	Ward 8	Toronto
Average household \$	\$52,820	\$87,038
#1 place of birth	Guyana	China
Immigrant population	64%	51%
Profession	Sales, services	Sales, services
Unemployment rate	12.50%	9.30%
Food sales in ward	\$191	\$567
Higher learning	40%	58%
Average monthly rent	\$862	\$1,026

Table 7: Dufferin and Bloor or Dufferin Grove.

Life indicators in 2010	Ward 30	Toronto
Average household \$	\$89,388	\$87,038
#1 place of birth	China	China
Immigrant population	36%	51%
Profession	Sales and services	Sales and services
Unemployment rate	7.50%	9.30%
Food sales in ward	\$168	\$56%
Higher learning	60%	58%
Average monthly rent	\$889	\$1,026

The matter of selling isn't just about pricing but also about the people involved in trading goods. We shall now converse about selling, or making a sale, which can manipulate the three listed pricing methods due to the ability to convince human beings to buy your product. To do so, I will provide a quote from Cloutier and Marshall's (2009: 128) *Profits Aren't Everything, They're The Only Thing*, "Large or small, if your business doesn't have a disciplined, aggressive and accountable sales program, it will fail. And that's exactly what's happening to thousands of small businesses, where making sales requires constant, disciplined effort." The discipline can come naturally or gained through training. Some of the characteristics of good salesman are their positivity, outgoingness, compassion and public speaking skills. So people who are shy and introverted are usually not at the forefront of making a sale. Selling is the process of transferring goods or a service from one person to another (Fox, 2004: 236). Although it doesn't state that it

is a monetized transaction modern day selling is not about bartering but is an exchange of money for a product and not a produce-to-produce transaction.

Let us talk more about developing winning sales quality. According to Fox (2004: 237), “An ideal salesperson can empathize with customers and is sensitive. Dedicated, competitive, energetic, self-driven. They are quick thinkers, good communicators, understand figures, loyal team players, outgoing and charismatic. Willing to learn, can work independently, are honest.” Intelligence in the successful actions is the action to sell you food for example is based in the knowledge and belief in the product that the salesman has in his or her possession. In other words, it helps to understand that the product or services is required or welcomed to the customer, who must be engaged and presented wisely with the commodity or inventory product. Jeffrey Fox (2004) identifies Five “Ws” of selling. Fox (2004: 239) writes: “You need to understand and use the five “Ws” of selling. Ask yourself these five questions before you attempt to close a sale. You will be pleasantly surprised at how much easier it is to complete the sale.” Fox’s (2004) five Ws are: Who is buying? What do they need and want? Why do they need it? Where do they need it? When do they need it?”

Peace Farms conducted demographic research for the business class in 2015 and below (Table 8) is a chart of my nearest customer.

Table 8: Customer Profile

Demographics	
Age	29
Income	689/month
Marital/Family status	Single
Ethnicity	African-Caribbean
Language(s)	English
Gender	Male
Education	High School
Geographic	
Location	Jane Street
Psychographics	
Lifestyle descriptors	full time worker
Hobbies/interests	
Music Preferences	Rap, Capoeira

By understanding this profile you can be empowered to approach customers confidently to make a sale, and also, this stage is when some say the product sells itself. Some businesses start with debt and must price their goods to recapture their budget spending from the customer or market. Please see the example of a start-up cost below. Table 9 shows how much money has been invested prior to market capacity and more importantly it explains mark ups and why certain prices must be placed on goods in order to retain invested monies.

Table 9: Start-up Costs for Market Gardening (Fortier, 2012: 9)

1 greenhouse (25' x 100')	\$11,000
Two-wheel tractor and accessories	\$8,500
2 hoophouses (15' x 100')	\$7,000
Cold room	\$4,000
Irrigation system	\$3,000
Furnace	\$1,150
Flame weeder	\$600
Indoor seeding equipment	\$600
Hoes and wheel hoe	\$600
Broadfork	\$200
Seeders	\$300
Rakes, shovels, spades, wheelbarrow, etc.	\$200
Harvest cart	\$350
Floating row cover, anti-insect netting, and hoops	\$600
Sprayer	\$100
Harvest baskets, scales, other equipment	\$300
Electric fencing	\$500
Total	\$39,000

With costs like these to pay up or pay back, it is wiser for one to be prepared for spending and or acquiring some debt. This start-up cost is an important bill to assist with setting future prices for customers to pay for. For new entrepreneurs Slaunwhite, Savage and Gandia (2010:128) write: “How you price your freelance services can mean the difference between a business where you are consistently working on great projects that pay well, to one where your schedule is filled with low-paying work- or, worse, no work.” So don’t feel bad charging customers for services provided. Spent time and labor requires rejuvenation that profits can supply. While Slaunwhite, Savage and Gandia (2010) recommends that you price responsibly, Sugars (2006) suggests and promotes selling value added products too. According to Sugars (2006: 57) “Increase your chances of finalizing the deal or sale by asking your clients if they would like either the red one or the blue one-delivery on Wednesday or Thursday - if they will pay by check or credit. Always give people a choice between one way and another, and never

ask a question that can be answered by yes or no, because chances are they'll say no. Assume they're going to buy; just ask a detail- oriented question to confirm the purchase... The more your customers know about your full product and services list, the more they will buy. Place signs around your business to inform your customers of things you do." This is similar to buying a burger at the famous McDonald's with happy cashiers asking you to add more value to your meals i.e, fries, pie or smoothies.

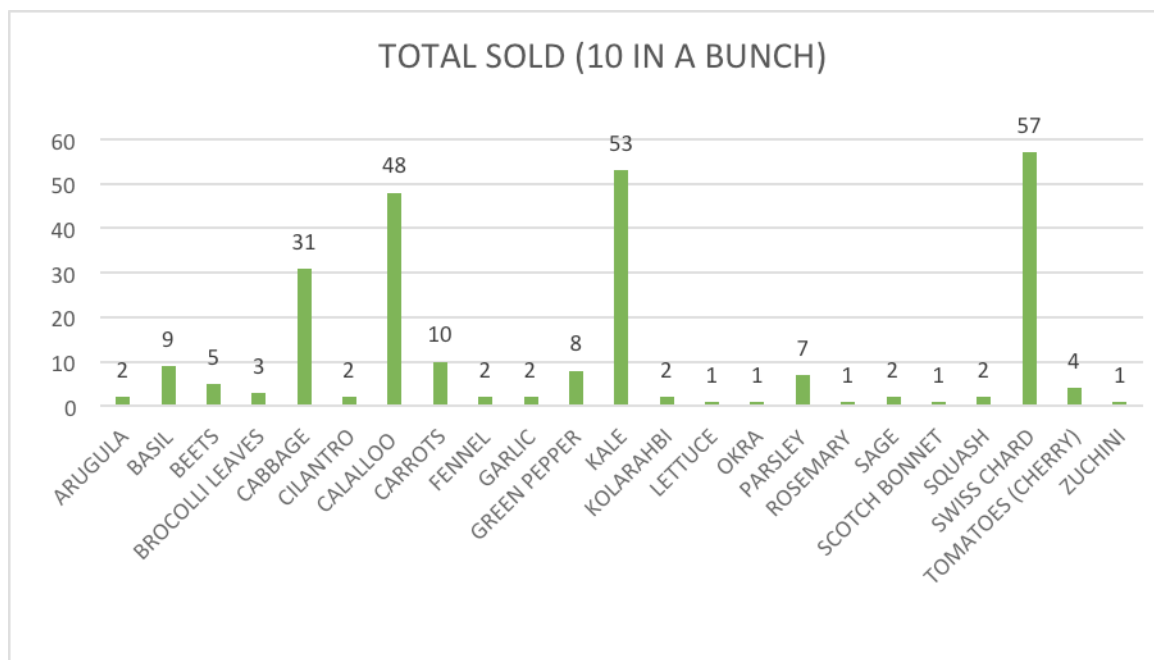
Below in Table 10 is a chart of my cost of goods (COGs) production designed to keep prices at a minimum. The chart was part of the Peace Farms class assignments from the Learning Enrichment Foundation (Lefca.org) in 2015.

Table 10: Peace Farms Cost of Goods

PEACE URBAN FARMS			
Per Unit Product and Service Variable Costs			
	Flowers	seed cost	5
		farming	0
Source of Money/Service		selling	0
		transport	0
		space	0
		Total Product Costs per Unit	\$5
		Service Cost per Unit	
		Sales Commissions	0
		Delivery Cost	0
		Payment Processing Fees	0
		Total Variable Costs per Unit	\$5
	Medicinal Plants	seed cost	3
		farming	0
		selling	0
		transport	0
		acquiring space	0
		Total Product Costs per Unit	\$3
		Service Cost per Unit	
		Sales Commissions	0
		Delivery Cost	0
		Payment Processing Fees	0
		Total Variable Costs per Unit	\$3
	Fruits & Vegetables	buying seeds	3
		selling	0
		farming	0
		marketing	0
		accounting	0
		Total Product Costs per Unit	\$3
		Service Cost per Unit	
		Sales Commissions	0
		Delivery Cost	0
		Payment Processing Fees	0
		Total Variable Costs per Unit	\$3

Limited cash flow can run your business into bankruptcy. Alternatives to compliment the pricing of products can help raise funds and cut costs. For example, farmers can goods, sell seeds, or educate to boost their income. A company like Apple is not known for its MacBooks alone but also for their side products such as iPhones, iPads, cables, etc. The demand is continually changing to suit the businesses that want to keep up with customer satisfaction. And that means replenishing a new solution for all the clients' needs. The provided explanation for this willingness to venture into other products is the return's profitability to recoup investments. According to Sugars (2006), "an easy way to gain more wallet share is... extended warranty... Running in-store promotions not only to create interest in products or services people buy as add-ons, or on impulse, it's also a great way to increase profits... Flashing light specials are a fun way to add to your bottom line which lasts 10-30mins." Added values are dynamic and last year I sold more popular crops combination to people I knew or receptive clientele. The added values sold are all the crops that sold under \$10 (Table 11).

Table 11: Peace Farms Total Crop Sales in 2015



These are examples of everyday consumerism as customers pack up on products and warranties in and out of the urban shopping plazas globally. But what it really teaches us is the kind of mixture between services and payments and how they are exchanged conveniently to

satisfy both customers and service providers. I keep growing food to sell and the projections are not all standing domes or pillars which means some crops are mightier in taste compared to others. At this stage reviewing the facts in graphs and sales is crucial. To help us really organize activities we re-visit McGukin's (2001: 150) steps of growth analysis:

1. evaluating where you are now;
2. deciding whether you want to and are ready to grow;
3. setting goals;
4. planning how to grow.

Carefully planning will reduce stress and keep the owner informed and timely. There is nothing better than asking for an information update and receiving it promptly and accurately. It is also important to compare progress to projections because it is like asking if you kept your word or stayed focused on the road to riches.

Getting a yes or no from a customer you just met or a customer trying a new product can better your profits. Therefore, selling is cool for the net profit, until the government wants in. According to McGukin (2001: 159), "The most important factor to the success of your business (small or big) is to have a customer. Having a customer is more important than the business idea, the management, financing, plans, or anything else. This is rule number one and must never be forgotten or violated. Having a customer means that one person or many persons will absolutely buy your product now, or will buy it when the product is available."

Have you ever caught a glimpse of the lineups for Apple products or a new movie opening up in the news? People need things, and customers shop and worship all sorts of products, making the sales game a welcoming experience for those who understand it. Customers are unique like their products and therefore not everyone will have tomatoes as their favorite vegetable. Being aware of diversity helps you make sales.

Customizing is expected and your company can become the go-to for someone who really needs a specific product that you are accustomed to producing and marketing wisely. Leaders in the marketing stream study their products closely because as they say knowledge is power. But things are never expected to be absolutely perfect. As Kennedy (2015: 238) writes: "Don't try to get leadership perfectly right and don't go in alone. As you plan for sales and then

execute on your plan, use other people as a resource to help you, in the planning and in the execution. Value implementing your plan quickly over seeking perfection. No matter how solid your plan looks, you need to tweak and change it frequently. The world isn't unchanging so your sales plan can't afford to be either."

Flexibility is the key to success. It is mixing products, psychological advertisement wisely influencing all who believe in the dollar for the market. When the bags are packed and everyone knows what you're selling, you need to define a sales process that the team can follow to ensure clarity on what to do, when and how. A sales process will give you, as a leader, a foundation for monitoring and measuring how sales are performing (Kennedy, year: 240).

In Phase 2 of the Peace Farms project, I questioned what it would take to make \$3000 paying close enough attention to pragmatics and mode of acquisition for example I was concerned about how to fundraise the money or utilize only product sales profits. In the real business world it can take up to 20 years and many wild unfortunate stories to raise profits wisely. Teams are also composed of more than one individual just to show the comparative difference between Peace Farms organic farm business and for example a Monsanto I know. Kennedy (year: 98) [over]simplifies the growth of business nearly down to anything: "Business development is essentially forward-looking. You require discipline to prioritize tasks that bring longer-term benefits, rather than immediate gratification, and to work on the activities that can wait until tomorrow – while dealing with today's priorities, including the crisis of the moment. After all if you can push business development activities to tomorrow, why not next week or next month? No, for your business to succeed you have to plan properly, develop clear goals and work daily to achieve them."

The year 2016 is the second phase of a disciplined journey. Accompanying the Peace Farms business flow chart, will be the organic farmer's crop planning methods (Coleman, 1995). Slow and steady wins the heart of the business which believes in peaceful eating and coexistence. Without power there is no force, and without force the human will powers the universe according to Spinozan philosophy (Surin, 2011). We need food to feel good and healthy. The idea of food is already incorporated in the basic human emotional core, which makes us seek, and cook for nourishment and contemplation. A good sales person should be aware of the product s/he is pitching to the customer. Food is important and is a basic need therefore not as confrontational as buying a necklace. When it comes to business growth, "Sales

is no different. Sales is the lifeblood, the driver, of business growth and success, so it has to be a central part of business development. If you don't know who's on your prospective customer list, who your next three customers are likely to be or whether to hire or layoff staff, you require good sales leadership. Without it, your plan for the growth of your business is going to be hobbled right out of the starting gate" (Kennedy, 2015: 237).

New sales were gained with customer satisfaction and repeated purchases in the Lawrence Heights Community or Jungle. Below (Table 12) is ward information in comparison to the rest of the city.

Table 12: Lawrence Heights Community (aka Jungle)

Life indicators in 2010	Ward 15	Toronto
Average household \$	\$71,529	\$87,038
#1 place of birth	Philippines	China
Immigrant population	56%	51%
Profession	Sales, services	Sales, services
Unemployment rate	8.40%	9.30%
Post secondary education	52%	\$567
Average monthly rent	\$909	\$1,026

In Lawrence Heights I sold to 5 customers at least twice. The crops sold were calaloo, rainbow carrots, and purslane. Whether a story or a plan to get \$3000 from the market sales is a crucial part of the business transaction between the producer and the payee. Without it in your plan you will not succeed. Be nice to customers who will hopefully advertise for you. All this takes time and money to function accurately. Below in Table 13 is a clip of financial statement from a farm in Quebec illustrating the cash-cropping techniques. Cash cropping is a borrowed term from the International Development Studies. Farmers in the global south are tricked into over farming exported crops which are called cash crops because they are purchased with dollars (Geepu 2008).

Table 13: Annual Sales at Les Jardins de la Grelinette (Coleman, 1995)

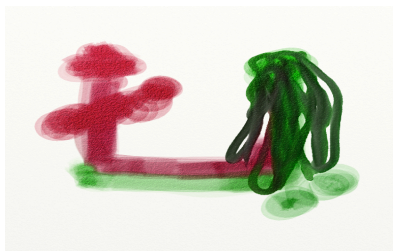
Vegetable	Total sales	Price	Number of beds per season*	Garden space	Revenue per bed	Number of days in the garden	Rank (sales)	Rank (revenue/bed)	Profit
Greenhouse tomato	\$35,200	\$2.75/lb.	4	3%	\$8,800	180	1	1	✓
Mesclun mix	\$15,750	\$6.00/lb.	35	18%	\$450	45	2	19	
Lettuce	\$9,000	\$2.00/unit	18	9%	\$500	50	3	15	
Greenhouse cucumber	\$8,280	\$2.00/unit	6	2%	\$1,380	90	4	2	✓
Carrot	\$6,600	\$1.50/unit	8	4%	\$825	90	5	5	
Carrots (bunch)	\$6,515	\$2.50/unit	14	7%	\$465	85	6	18	
Onion	\$6,075	\$1.50/lb.	9	4%	\$675	110	7	10	✓
Pepper	\$4,400	\$4.00/lb.	8	4%	\$550	120	8	13	
Broccoli	\$3,900	\$2.50/unit	13	7%	\$300	65	9	28	
Snow snap peas	\$3,840	\$6.00/lb.	8	4%	\$480	85	10	16	
Summer squash	\$3,690	\$1.50/lb.	6	3%	\$615	70	11	11	
Green onion	\$3,360	\$2.00/unit	4	2%	\$840	50	12	4	✓
		\$3.75/lb.	8	4%	\$410	70	13	24	

According to Table 13 from *The Urban Gardener*, farmers can grow to sell thousands of dollars of food given the right conditions such as spacing and customers. The first column lists the crop variety, e.g., greenhouse tomatoes. The second column shows the total sales of \$35,200. The third column indicates the unitary prices, i.e. \$2.75/lb. Information in columns 4 and 5 tells us that their farm is pretty large compared to any school plot given to grow an organic food business. In year 2, my farm plot was cut down to about a half (200 ft.) of what it used to be (500ft) due to new management methods. Back to the table, we find the revenue per bed, which represents \$8,800 for greenhouse tomatoes, days to maturity or number of days growing in the garden before harvest (i.e. 180 days) and a ranking of crops by profitability in comparison to other crops. And finally, the last column ranks the crops by their potential revenue per bed or in

other words how expensive or profitable are the crops on that bed/plot. Using this method I can plan for next year by growing “cash crop” or tomatoes but the challenge will be finding customers to enhance sales.

In conclusion crop pricing and selling go together and distribute goods politically and economically. Supply and demand for food is not a battle with Peace Farms because of regulated pricing on affordable medicine and food. This section taught us about market targeting like demographics, cash-cropping, value added products and last but not least location. In the examples, experts show us that it is possible to do business wisely but it takes commitment and desire. Committing to prices and techniques is like committing to quality and sustainability for some. Peace Farms, African Food Basket and Black Creek Community Farm all chose wisely in producing organically. The trust in organic food quality allows for price changing and the income locations in the city generate potential for successful markets.

2. CROP PLANNING



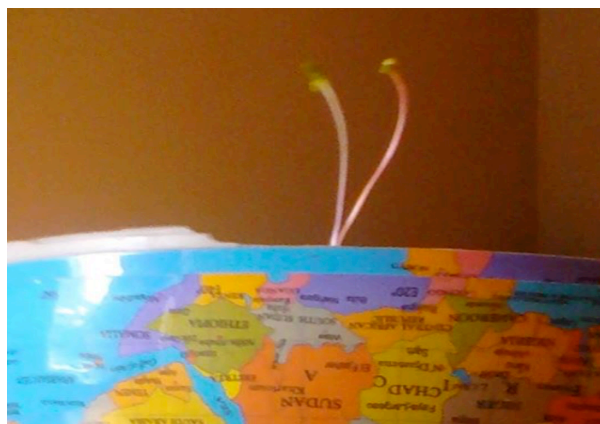
Introduction

The type of plant and where to put that plant belongs to the science within crop planning. Interestingly, crop rotation itself is for pest control and nutrient regeneration in the soil, for example with living organisms and plants like barley and soil bacteria (Mohler and Johnson, 2009). What does it take to grow food? For example, keeping your soil cool with carbon (woodchips, sawdust, fresh leaves) coverings on the top of the topsoil layer. To explain crop planning I will utilize cut-outs of crop planning materials and assist the expert gardeners to explain, texts, graphs and dates. According to Tozer (2008: page) who wrote in *The Organic Garden's Handbook*, crop planning means planning the garden and “planning the garden means deciding what crops you want to grow, which varieties, how much of each, how much seed to

buy, when to start seeds (indoors and outdoors), when to prick out and transplant, where to put them and more.” This concept is without the weather, or Molly Brown’s (2014) idea of food security, which is about climate justice, accessibility and pricing of food around the world. The weather is too big to capture accurately into the crop plan, and farmers always wish for more rain but not too much rain.

Crop planning requires knowledge of transplanting to direct seeding. Transplanting is growing the plant indoors and moving it to an outdoor bed when it is big enough. Direct seeding means planting the seed in the outdoor garden/farm from the start. Transplanting and direct seeding are among many funny terms that farmers use daily to speed up their activities. Some of the linguistic techniques are very easy understand while others demand some clarifications. I am borrowing from Fortier (2012) and his list of things said to farmers by other farmers to complete tasks that can be long and tedious but super important. It explains some of the key languages used in crop planning such as H-Harvest, I-Indoor seeding, DS-direct seeding and T-Transplanting. Harvesting deals with time and maturity of the crop. To harvest in agriculture is to physically remove the crop for sale or and consumption. Indoor seeding means growing the food inside a greenhouse or indoor space which can be transplanted later or not. Most farmers are friendly people and are waiting to assist you kindly. They may also have cool features, like being able to know when it is going to rain, or which crops will be good and which ones will not. There is always something supernatural with farmers and farming.

Germinating in a dark closet in a Dollarama globe that fell open



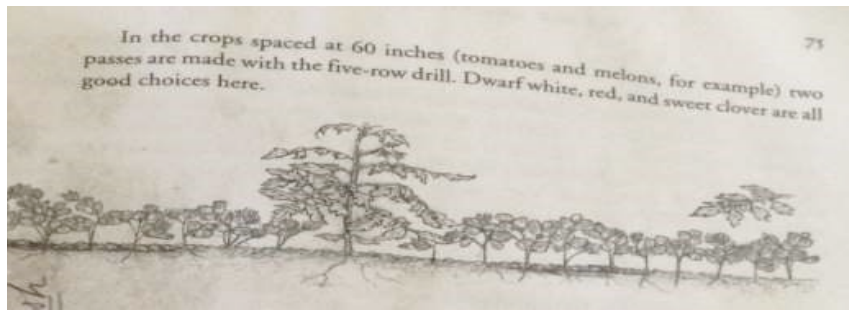
Spacing

The soil should already be prepped and healthy for growing plants to mature before you begin growing food in the soil. Whether it's a long or short project, large or small farm, sustaining the plant food must come first. I read many books and took courses on sustaining soil nutrients and Coleman's (1995) report stands out best for his simple yet key argument: "feed the soil and not the plant". If you are gardener or farmer in Ontario you may have tried placing fish emulsion or left over food at the base of plants, hoping to dissolve it into the soil above the root system. This is very common with the native farmers and the three sister's crops (beans, squash and corn). However, Coleman (1995) is looking at the bigger picture and requesting that farmers use legumes (beans, lentils, clover, alfalfa, peas, beans, peanuts etc.) because they retain or restore the nutrients in the soil (nitrogen, phosphorus, potassium). When we sell food we have sold soil also and that soil may never return due to many reasons, such as bad recycling. It takes time and good soil for plants to mature or become fruitful. This due date is known in the farmers as days to maturity.

Here are some examples of harvesting in practice. "Beet or rutabaga leaves can be cut when they are about 3 inches high. Start harvesting carrots when they reach finger size, beets and rutabaga when they are the size of golf balls, and radishes when they are marble size. Gently tug the plant from the ground" (Abbott, 2012). In order to continue harvesting all year the soil must be feeding the beets and rutabagas all year also and that is why it is good to keep nourishing the soil. The best rainfall touches everywhere in the garden and all plants can get some including animals. However when we garden we usually focus on just the crops we want and we target instead of bless the space and crops altogether.



Understanding the measurements and spacing of crops is crucial since squishing crops together deters their proper germination and causes loss of inventory. Examples in *The Organic Grower* (Coleman, 1995) show the spaces between tomatoes and intercropping mixes such as clovers that help the nutrients in the soil and retain water. The tomatoes have enough space to play and grow healthily because the intercropped plants do not compete but assist the ‘cash crop.’



Timing

The timing of the harvests always differs for intermix crops and allowing clean plot spacing will permit you to access them safely all year round. The cleanliness of garden bed above also keeps bugs and diseases out because of good ventilation and spacing. Plants differ like people, some take weeks like herbs and others take months and years such as raspberries. From the picture above you can see the legumes beside the main crop or the cash crop. They are symbiotic and they exchange nutrients made from the environment. If the legumes or intercrop mix were also large plants then you would minimize the potential of the tomatoes, which require a minimum of 24 inches apart from other large crops or other tomatoes. Whether it is by transplanting or direct seeding the close proximity of plants compromise their future performances. Therefore, save the crop bunching for harvest and market days. This bright green cabbage requires 24 inches of space to grow successfully.



Days to mature means the time you plant until the time you harvest. Table 14 lists examples of days to mature for seeded crops (Thériault and Brisebois, 2010). The first and second columns respectively list the crop and their scientific family. The third column lists the days to mature period. Column four specifies the planting frequency to maximize harvest. The last two columns indicate the number of rows and preferable distance between seeds. Table 15 shows number of crops sown based on a farm whose motives are to raise profits.

Table 14: Direct Seeded Crop Reference Chart

APPENDIX A VEGETABLE REFERENCE CHARTS

CHART A1 – DIRECT SEEDDED CROP REFERENCE CHART

CROP	FAMILY	DTM ^a	PLANTING FREQUENCY	ROWS PER BED	SEEDS PER FT
Beans	Legumes	56	2 – 4 weeks	2	12
Beets bunched	Chenopods	49	2 – 4 weeks	3	16
Beets topped	Chenopods	49	2 – 4 weeks	3	16
Brassica Greens	Brassica	28	1 – 2 weeks	3	55
Carrots bunched	Umbel	56	2 – 4 weeks	3	30
Carrots topped	Umbel	56	2 – 4 weeks	3	30
Cilantro	Umbel	56	1 – 2 weeks	3	30
Corn	Graminae	70	2 weeks	2	2
Cucumbers	Cucurbits	63	4 weeks	1	3 ^b
Mill	Umbel	49	1 – 2 weeks	3	30
Garlic	Alliums	^c d	once	3	2

The first column of Table 15 shows the crops chosen to be grown by the gardener. The second column shows the scientific family that the crop belongs to. The third column indicates the number of rows designed onto the bed. Column four specifies the spacing between plants and the rest of the table records field planting dates.

Table 15: Field Planting Schedule

TABLE 3.2: PART OF BRUCE AND HANNA'S PRELIMINARY FIELD PLANTING SCHEDULE

CROP	NOTES	ROWS PER BED	INROW SPACING	FIELD PLANTING DATE					
				01-MAY	08-MAY	22-MAY	05-JUN	19-JUN	26-JUN
Garlic	Allium	3	0.5 ft						
Onions	Allium	3	1 ft		400				
Scallions	Allium	3	0.5 ft		50				
Arugula	Brassica	3	DS						
Broccoli	Brassica	3	1 ft		65	65	50	20	
Kale	Brassica	3	1 ft			35	65	65	
Kohlrabi	Brassica	3	1 ft				65	35	
Radish	Brassica	3	DS				50	35	
Lettuce	Aster	3	1 ft			35			

Focusing only on the numbers starting from column 6, these farmers raised profits by growing more. For example, 400 onions sown in one month grown 1ft apart as shown in column 4 means the bed of 400 onions will be 400 ft. But then in column 3, they describe splitting one bed into 3 rows to contain 400 onion crops. Onions require 12 inches of spacing and 103 days of growing to be usable for us.

Watering

To insure a good harvest, it is important to prevent withering and over-heating (which can make the plant go to seeding instead of leafing which is also called bolting. “One rule of thumb says you should give your plants 1 inch of water per week in summer and about a half an inch in spring and fall” (Tozer, 2008: 174). Another common rule is to keep the soil moist through. For larger projects drip watering is recommended to avoid carrying buckets of water up and down 100 ft. bed. Drip watering is “automatic watering systems, can reduce water consumption, increase yields, can work with low water pressure, suppress weed, reduce the work and are practical. Disadvantages; expensive, complex, inflexible and locked, emitters clog, plastic lines can be cut” (Tozer, 2008).



In 2014, I enrolled in Introduction to Planning course taught by Professor Laura Taylor. Handing in the assignment on due diligence was a good feeling and I used planning techniques to

survey my plots. I plant plots of crops in order to harvest fruits and vegetables for sale in Toronto. Tozer (2008) writes about greenhouses, pests and watering that impact practical farming in general. Cullen (2002) talks about gardening and farming decoratively and historically. Their works help in addressing native plants on plots and protecting crop life from predators. These facts can help inventory safety and sales as they are a direct correlation to nutritional quality in food.

3. PEACE FARMS REPORT



Introduction

This final section focuses on reporting the activities of Peace Farms in 2016. The second season has foraging, seed losses, trips, new business, experiments both pros and cons. It also included scholarships, grants, travels, new customers and patience learned as well as seed failures, administration boredom, competition and advertising, expenses.

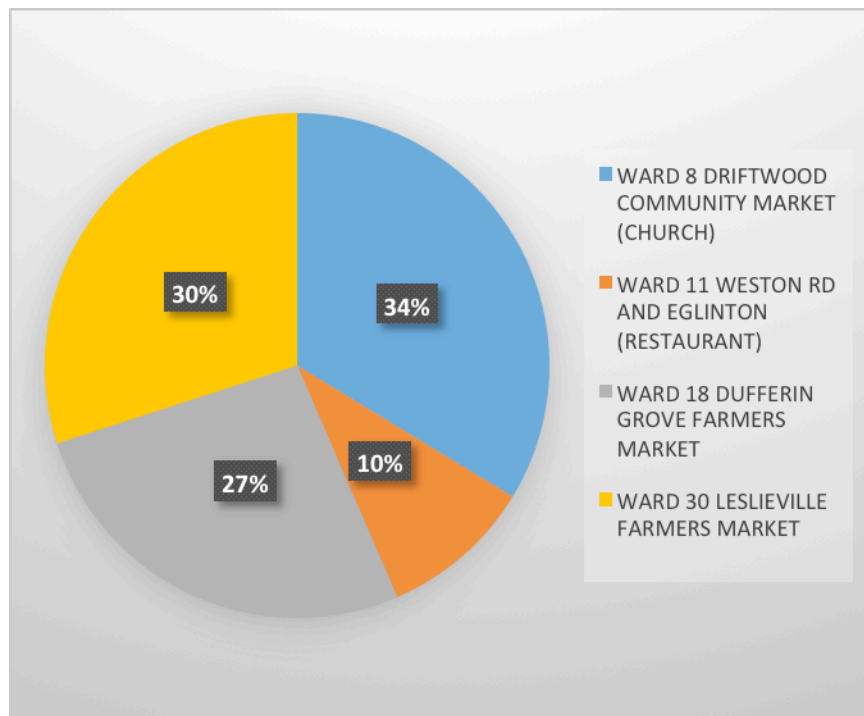
It starts off in October 2015 and ends in May 2016, where I use Damian Adjodha's lessons practiced in 2015. I constructed a green bin greenhouse in my basement apartment to grow transplants for Canada's post-frost date May 24 2016. From December until February I use advertising books by Cortese (1999) Twitchell (1996), Driver (2007) to understand customers in the streets and online. There are described issues of the market and seed experiment results. From March-June, I illustrated these flyers on the www.peacefarms.ca website, the Facebook page Peace Farms www.facebook.com/peacefarms, Twitter Account TdotPeaceFarms, including Shopify and etc. I was a website engineer corresponding with potential customers in the summer and travelling to Jamaica for seeds. July-October was concentrating on the business strategies research based on McGukin (2001), Sugars (2006), Kennedy (2015), Gerber (2010) and Fox (2004) among others. July meant crop planning and by now real events such as seed failures at

the farm created a secondary crop plan project. Marketing issues caused blocking of access to past markets by African Food Basket. August–October 2016 was busy completing courses and submitting my major project report.

Farming Business

I will use information from last year to identify key differences between the 2015 activities of Peace Farms to 2016. I didn't have a lot of experience running a business, or engaging new customers in various wards in Toronto. But following 2015 surveys I learned a lot about shoppers and poor living standards. People were willing to spend money on food that they already knew (culturally specific foods), and engage me in things they didn't know (nutritional value). The wards are racially and financially segregated. It was love and hard work for organic food and employment opportunities that encouraged me to go through the diverse channels to grow and sell food to the 4 different wards (8, 11, 18 and 30) in 2015. I had to rely on intuition, which is not what 2016 research focused on. See below for the 2015 sales in four different wards across the city.

Table 16: Total Percentage of Sales in 4 Toronto Wards in 2015



The 2015 total sales were divided amongst four wards mainly from the north to south of the city. The first year sales were almost \$600 and it comprised of rich and poor community. I sold almost the same amount of culturally specific and Eurocentric food groups. Crops were planned and customers satisfied with fresh food. I thought it would be easier to make more food and money in 2016 based on the 2015 results. However, there were many changes in 2016 like access to Wards 18 and 30 farmers markets were eliminated. I recorded 2016 incidents with Multi-Medias such as iPhone video camera recording device and iPhone notepad to crop planning and business strategy in year 2. The farming season for Peace Farms began in October 2015 until October 2016. With victories and successes I shall report 2016 as it was unfolded. I will talk about it chronologically ranging from recorded activities from October 2015 until October 2016.

In 2015, Peace Farms was supported by class participation, Caveleiro Greenhouse and the assistance and knowledge of Damian Adjodha. I was able to grow a lot more food in Year 1 than in Year 2 (see comparison between the two seasons below). Both years have amounted to nearly \$800 of profits based solely on crops harvested. Below are the graphs showing the total sales in all the wards that participated. Altogether Peace Farms made almost \$600 in profits. This year only I was available for only one market, which was the highest grossing market last year net. It took a lot of work and new skills acquired gaining trust and relationships in Toronto.

Table 17: 2016 Sales in Various Wards

Aug 5th 2015	Ward 8	Total sold \$191
Wednesdays		
Market	Price	Total quantity
Driftwood	\$2 average	10 leaves in a bunch

Aug 7th 2015	Ward 11	Total sold \$58
Fridays		
	Price	Total quantity
Mt. Dennis	\$1 average	10 leaves in a bunch

Aug 27 2015	Ward 18	Total sold \$150
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Thursday

	Price	Total quantity
Dufferin	\$3 average	10 leaves in a bunch

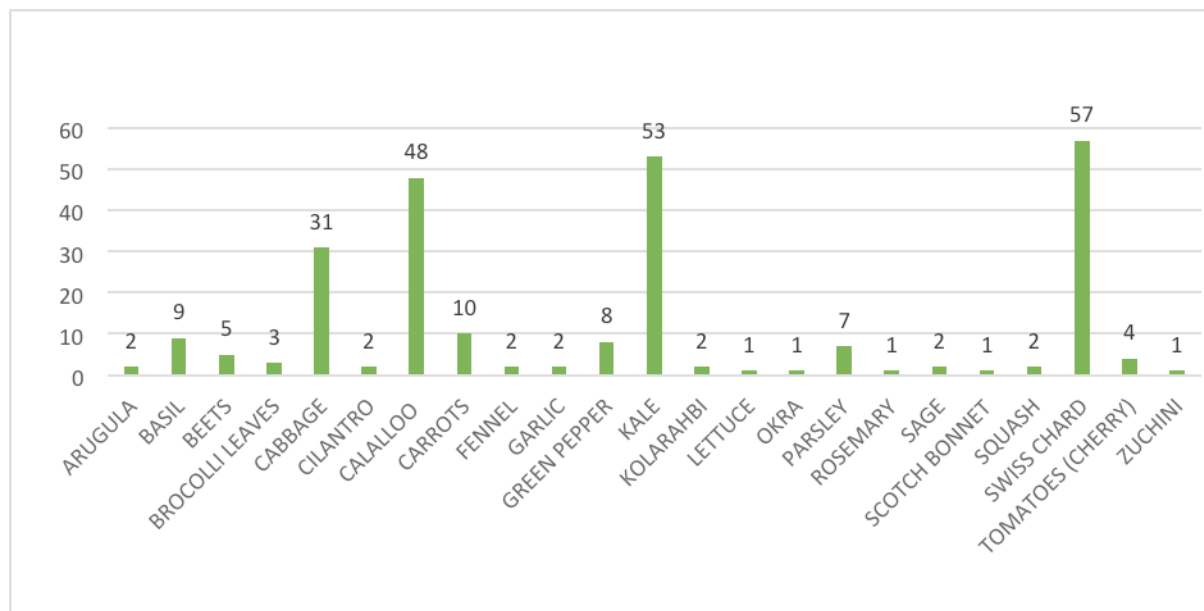
Aug 30 2015	Ward 30	Total sold \$168
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Sunday

	Price	Total quantity
Leslieville	\$3 average	10 leaves in a bunch

The crop plan in 2015 made a business strategy short in profits due to reluctance to start charging customers \$5 from the get go. It does however operate in more wards than 2016. There was also more land space to explore and teach courses with Damian Adjodah. For a detailed look at 2015 crop sales look below (Table 18).

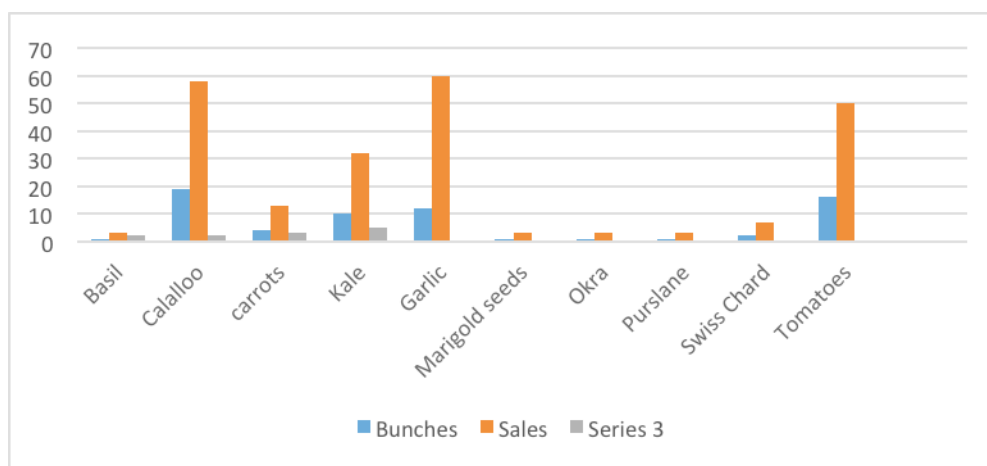
Table 18: 2015 Crop Sales



The crop list began to climb above the hundreds in my head last October as I practiced Capoeira and continued my flow chart. My rent alone was \$550 a month and without school

funds I would need a lot more veggies. This year however saw some improvements although still didn't break the \$3000 sales goal. The Marigold seeds are worth \$3. The numbers ranging from 0-70 on the left in the graph match the dollar currency or the amount sold. The crop list shows that along with Marigold seeds, okras, purslane and swiss chards were some of the lowest selling crops from Peace Farms. The Marigolds flowers were the largest seller for Peace Farms this year.

Table 19: 2016 Crop Sales



When starting a business, a template asks two select 3 items to sell --mine were vegetables, flowers and medicinal herbs for farming and selling. The real trial is to set up all three components successfully. The original template pricing was as follows. The flowers were 40 dollars because they are harder to grow and require a greenhouse in order to meet February's market. They also have a demanding growing process and low supply in farmers markets. The vegetables were \$5 because that is the market rate for a bunch of most vegetables in Toronto. The medicinal herbs are very useful and cost less than non-holistic pills and medications. They are \$5 per unit (but prices can be changed) so that people can afford it. All prices are set according to community market income gap, and are thus subject to change according to market location.

Peace Farms runs 12 months of the year growing three different types of crops for communities in the GTA. The highest of the costs in start-up have been the insurance and web design charges, which combined to equal approximately \$1260. There are no salaries or commissions and the business is still only an experiment. The business was run from my home

until further notice; \$1167 will be spent to secure tools and utilities and \$1415 for professional service costs in the first year.

Table 20: Peace Farms Product and Services Variable Costs

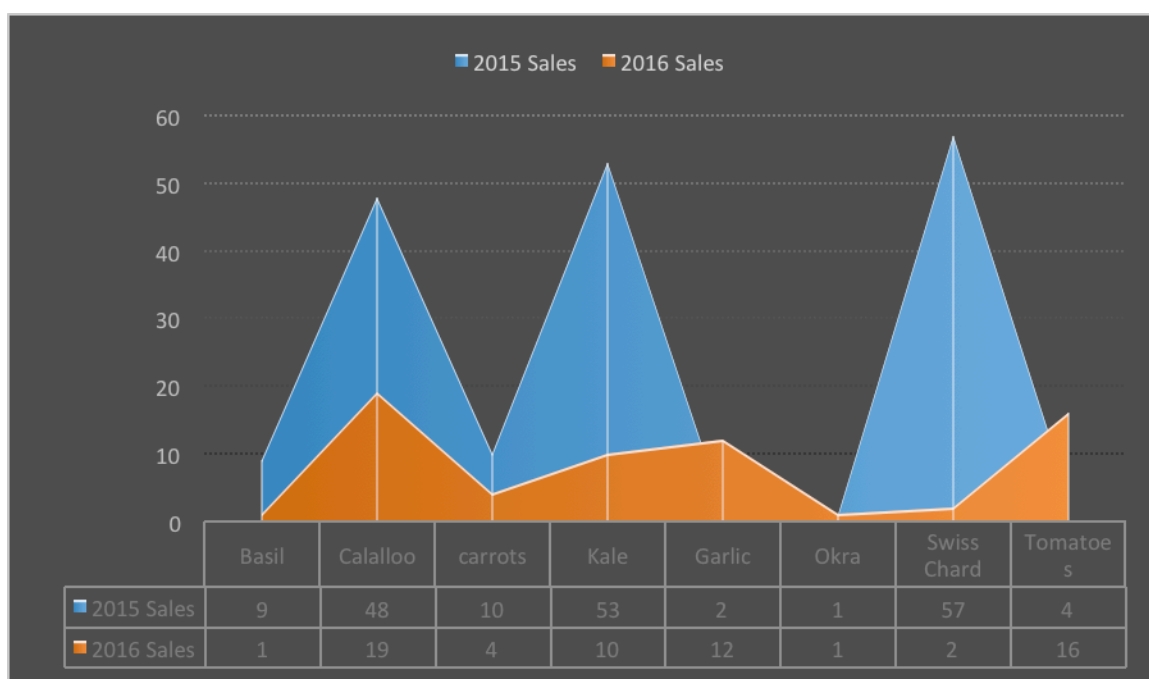
PEACE URBAN FARMS			
Per Unit Product and Service Variable Costs			
	Flowers	seed cost	5
		farming	0
Source of Money/Service		selling	0
		transport	0
		space	0
		Total Product Costs per Unit	\$5
		Service Cost per Unit	
		Sales Commissions	0
		Delivery Cost	0
		Payment Processing Fees	0
		Total Variable Costs per Unit	\$5
	Medicinal Plants	seed cost	3
		farming	0
		selling	0
		transport	0
		acquiring space	0
		Total Product Costs per Unit	\$3
		Service Cost per Unit	
		Sales Commissions	0
		Delivery Cost	0
		Payment Processing Fees	0
		Total Variable Costs per Unit	\$3
	Fruits & Vegetables	buying seeds	3
		selling	0
		farming	0
		marketing	0
		accounting	0
		Total Product Costs per Unit	\$3
		Service Cost per Unit	
		Sales Commissions	0
		Delivery Cost	0
		Payment Processing Fees	0
		Total Variable Costs per Unit	\$3

As you can see in Table 20, per unit product and service variable costs, there are many crucial parts in naming the price. The real costs raise food prices which is why it is outstanding

how some remain in the game after all these years. In a way financing a good heart is farming with loans backing you up. While some families can afford mark-up prices representing the real information in per unit production others would just go somewhere else.

The final graph in Table 21 contrasts the crop sales for 2015 (in blue) and 2016 (in red). Only crops that were sold in both years were plotted in this graph.

Table 21: 2015 and 2016 Crop Sales Comparison



Lack of sales comes from the lack of participation in the local markets in Wards 30 farmers markets that had paying customers. Instead of cooperation this year, African Food Basket complicated transportation and paid tabling at the farmers markets downtown Toronto. My seeds were also a disappointment as well as my late comings and assistances at York University. Both things were hard to anticipate. Peace Farms continues to look after poor families with healthy organics. I know business operations come with wars. Despite the difficulties in 2016 there has been good hope and knowledge learned.

Peace Farms raised more money in 2015 than in 2016 however, the issues faced such as seeds and market failures would have been worse in 2015, the start-up year. By increasing attendance at the farm and markets more money can be raised again.

Farming Activities

The Green Bin Greenhouse (October 2015)

The construction was started in Scarborough and moved together with me to Lawrence Heights in February. There were 4 green bins, two were used to grow cold plants such as potatoes and ginger, while the other two just tested hot seeds such as carrots, kale, and Swiss chard.

I purchased 4 fluorescent lightbulbs from a local gardening store located at Steeles and Norfinch and constructed an indoor greenhouse. The setup was easier and completed on October 14 2015 in Scarborough. The bin covered with fluorescent light housed the winter term and notes from year one. The spin out of year 1 experience was to start early. I also purchased four tote boxes from Staples in which I would lay my rocks, soil, and water to nurture the seeding experiment. This experiment was required to meet the demands of last year's performances. The earlier the start the better for the crops all year. The bins were filled by Damian Adjodah's transplants and contacts at Cavaleiro Farms. The soil used in this experiment was prepared experimentally.

Anaerobic soil process requirements are inputs, bulking agents, moisture, time and labour. The inputs are greens or fresh garbage added to a compost bin or pile. This is also referred to as nitrogen. Bulking agents are the carbon or browns added to control pH levels. The ratio of greens to browns or nitrogen to carbon is 25:1-30:1. The pH level refers to the level of hydrogen activities, which gives off acid, or alkaline (strong smell is acidic and sweet smell is alkaline). The pH level ranges from 0-14 and a good compost balance will be 7. Anything lower than a 7 is considered higher in acidity and more than 7 is an alkaline rich compost. Acidity can be controlled by adding lime or limestone or more browns such as cardboard, saw dust or sticks. Moisture is generated from the heat within the compost, too much moisture can make the compost slippery and smelly as if it was too acidic but adding some air, carbon or browns can adjust this moisture build up. There is no air in anaerobic composting and there is also less labour inputs after the compost has been sealed. It is also safer from pests.

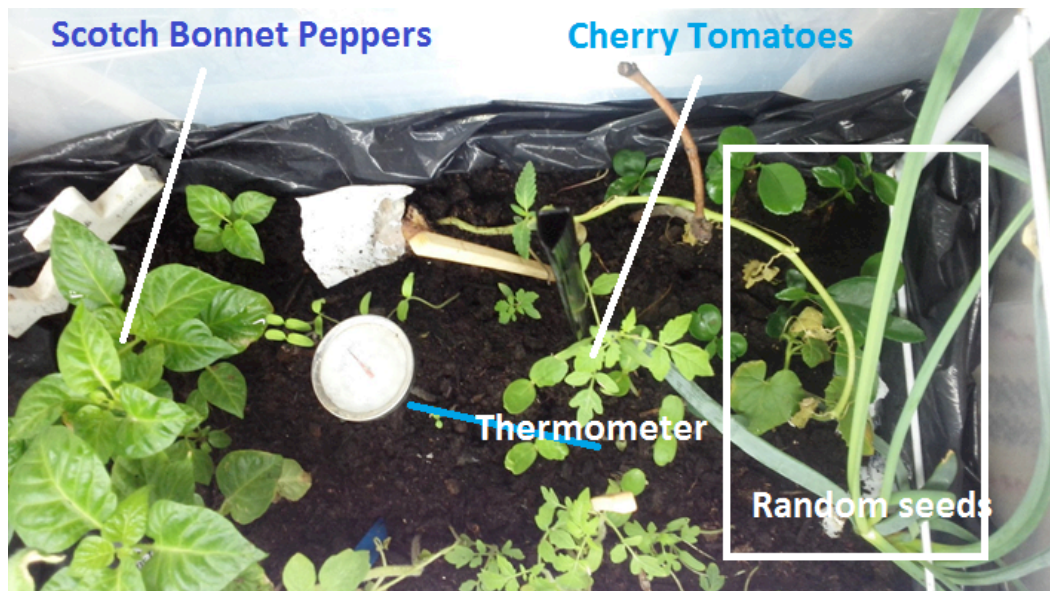
Aerobic soil process requirements are the same as for anaerobic soil. However, to add air stir your compost thoroughly and keep in open space, watch for larger pests that might eat your compost and spread it around. Time and labour requirement is increased because it is in an open area. 65 degrees Celsius after composting for about 2 weeks, the more inputs and bulking agents

the more heat will be generated. The heat difference can also be related to the size of the bin and how long the composting process is maintained. With these methods I replenished my soil using leftover food and woodchips in the green bin greenhouse experiment in 2015.

Using past experiences composting with FoodShare, Black Creek Community Farm and African Food Basket I prepared the right soil for the seeding experiment. Some of the books used to build compost and design the tote bag greenbin greenhouse were Nevin (2012), Magdoff (2000) and Misra, Roy and Hiraoka (2003). Some soil was composted using both techniques, others were donated from the Black Creek Community Farm. Many of the seeds used in the research were donated seeds. Participating donators were The Toronto Seed Library, Black Creek Community Farm, and individual farmers who had seeds to share. In the winter of 2015 seeds tests were conducted early to prepare for the 2016 crop planning and marketing. To do so, I set up indoor plot in box 1.7ft/1.4ft. Seeds were soaked in bowl of water to dissolve coating on October 15 2015. I set up indoor lighting over soil 4-5inches high and adjusted as needed to prevent freezing or overheating. Eight plants chose to mature: Tomatoes, scotch bonnet pepper, Swiss chards, curly kale, dinosaur kale, spinach, cornflowers, and onions. All the seeds were tested in my home in Scarborough, and then Lawrence Heights, Toronto. The successful plants were transplanted late in May to Black Creek Community Farm to continue seed research.

Table 22: 2015 Planting Record

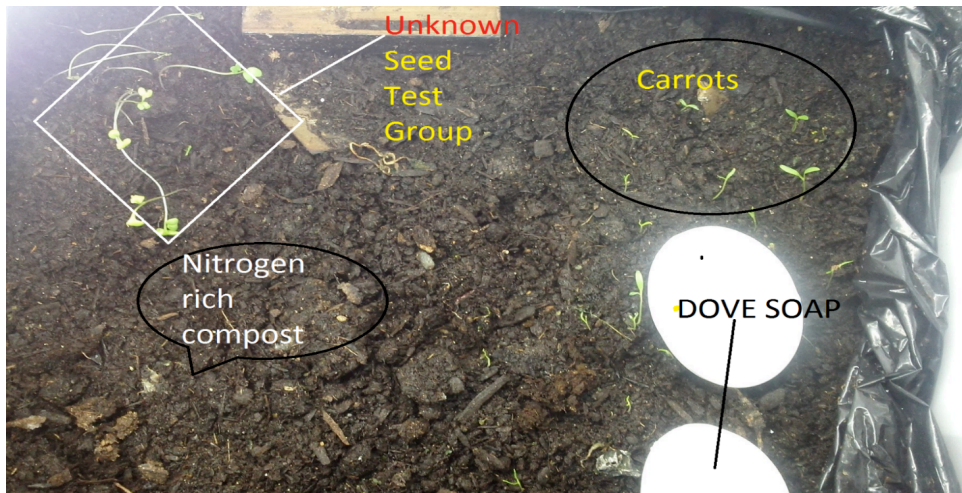
Crop variety	# seeded	Seeded date	Germination	First harvest
Onions	11	Oct 15 2015	no germination	Na- bad seeds.
Dinosaur Kale	5	Oct 15 2015	17th October	died from heat failure
Arugula	6	Oct 15 2015	no germination	Na
Spinach	22	Oct 15 2015	no germination	Na
Swiss chard	6	Oct 15 2015	Oct 16 2015	died from crowding
Cornflower	5	Oct 15 2015	no germination	Na
Tomatoes	10	Oct 15 2015	Nov 14 2015	10 harvest July 24th
S. B. Peppers	5	Oct 15 2015	Nov 15 2015	5 harvest Aug. 24 2016



The inside of the bins were wrapped in large plastic bag in case there was a drip in the watering system. The watering system was mostly hand watering with bottles since the project didn't require too much automation and watering. The indoor greenhouse requirements were 32 degrees from experience but the room temperature were usually about 22 degrees Celsius. Thus the blankets and artificial heaters were purchased and utilized to prevent frost and freezing during the experiment. The blankets permitted a higher heat. I used a thermometer located in the center of the bin to track temperature.

The picture below shows an experimental example of controlling high pH or acidic smell, which occurred from pure nitrogen rich soil with soap instead of woodchips and or oxygen. When the soil is this black and dirty it is usually lacking sawdust or woodchips. The soap experiment attempted to deal with the acidic smell and test the toxicity of the soap upon contact with organic seedlings such as the lime green carrot seed heads. In the end the soap did not cause any harm to the carrot seedlings, and was also able to impact the stench of compost in the house. However, it is not the same quality as woodchips and should not be used as a replacement but an addition. It is also heavier than the seedlings and can cause physical breakage of the young

plants. Therefore woodchips, and oxygen remains a stronger method for matching the acidity in the pH level.



Below is the picture of the cold plant bin growing potatoes to be transplanted in May. Unfortunately, they were over watered and that caused a mite infiltration, which destroyed the potatoes before transplanting. The eventual destruction of the potatoes crops was accompanied by my attempt to fix it by restricting water. The soil began to dry up too quickly as I had stopped watering immediately after diagnosing the mite infestation. It turned out that the mite problem is treated with dry sand, not dehydration, which killed my potatoes plants.



Transplanting May 2016

In 2016 I cultivated three plots in Black Creek Community Farm, Maloca Community Garden and Lawrence Heights Community Garden. The Black Creek Community Garden plot was used on May 24 to transplant 15 crops from the green bin greenhouse seed experiments. In early October 2015, I sowed 60 garlic buds to be harvested in late summer of July 2016 at Maloca. Lawrence Heights was the last to be farmed but I received York University Abshir Hassan funding to raise and sustain herb gardens and culturally specific crops --and it is where I conducted another greenhouse structure experiment to close the 2016 farming season.

Growing calaloo, garlic, basil and peppermint tea won the hearts of many residents in the community. The crop plans for the plots mentioned were arranged chronologically and began from May to June and ended with July to August. They are two different plans and the second one was created because of seed failures. The crop plans are color coded and the legends or keys are located on the top headings and the far left headings. The foods grown were sold and donated for philanthropic reasons, capital motives and advertisement to educate low income communities.

In the first week of May I was able to transplant 15 plants all together to Black Creek Community Farm from the greenhouse seed research. The plants were 10 tomatoes (beef stake and cherry) and 5 scotch bonnet peppers. As part of the experiment I studied the interactions between plants on the surface level in terms of how they exchanged space. As the space becomes confined the plants start to “bush” or gather together creating a foliage cover, which makes the stems and soil darker and harder to see. So the plants unlike people do not push each other around but seem to collide and wrap around each other on the surface. I always kept the soil levels up and water sufficiently for plants to keep the subterranean and root competition at a minimal. I observed significant changes in plant development: the scotch bonnet peppers were slowed down developmentally in the greenhouse conditions. They grew well in the greenhouse but slowed down post-transplant. As a result, their maturity dates have changed and have been extended. The scotch bonnet peppers should have been matured by February 15-25th. In May, they were shedding leaves profusely to adjust to the outdoor summer conditions after the greenhouse treatments. All leaves turned yellow and fell off as new buds and leaves blossomed all around the pepper plant. The trick was to figure out which stage of development the plant was in, as it has not developed flowers yet which will bring about its fruits given its root system

strength. It was the easiest plant to grow because it gave clearer instructions of needs as it spreads a wider leaf system.

The tomatoes were happy to be transplanted because they were also running out of space (normally they require 24 inches as matured crops). It has smaller leaf or foliage and thrives in the low heat areas, which was helpful since the temperature in the greenhouse was hard to get just right for all plants. The aim was between 27-35 degrees Celsius in the greenhouse. The tomatoes grew together, and without staking the stems fall and develop root systems as they touch the soil. This made transplanting harder as more soil area had to be dug up and out to protect the original rooting system and the new unstaked-stem roots, which were also very useful to the plants nutritional needs in the greenhouse. It is always better to leave the transplants a bit dry so that they do not break up during the transplanting. There are a few plants that do not need soil to be transplanted safely, among them calaloo, beets and onions.



Cherry tomatoes were transplanted in May 2016 – and (below) marigolds were used to prevent bug infestation.



Crop Plans

The crop planning process was tedious. A crop plan is a tool to manage the marketing experience easily by knowing exactly when plants are due for harvesting, and you can even input a harvest list into a crop plan to save time and space. My 2016 crop plan was a failure and had to be re-planned in July 2016 (see Table 23). In 2015, Peace Farms' crop plan rested on fast and affordable green leafy plants. In the crop plan below, these crops are listed in blue color and their days to maturity period is 30 days. I direct sow 100s of Swiss chards at Black Creek Community Farms in early June 2016. Long term crops such as garlic were not jeopardized because they had germinated successfully over the winter. The kales ordered were different from the kales received and did not perform well.

Table 23: Peace Farms 2015 Crop Plan

DATES TO MATURITY DTM	LEGEND FOR CROP PLANNING	NOVEMBER 180 DAYS	APRIL 330 DAYS	MAY 360-0 DAYS	JUNE 30 DAY	JULY 60 DAY
COLOR CODED DTM		DECEMBER 210 DAYS	CHOOSE SEEDS	SOW SEEDS INDOOR	KALE	RESEED F5
EARLY DTM	1=Yes Seeded IN TRAYS	JANUARY 240 DAYS	ORDER SEEDS	I.E. KALE	SWISS CHARD	CABBAGES
MID DTM	2= OUTDOORS ROW COVERED	FEBRUARY 270 DAYS	BEGIN SOWING	TRANSPLANT	CALALLOO	BROCOLLI
LATE DTM	3= TRANSPLANT IN MAY	MARCH 300 DAYS	SOW WISELY	COVER FROM FROST	MIXED GREENS	OKRA
CROP VARIETY	DIRECT SEED OR TRANSPLANT	SEED ORDER CHECK	GERMINATIONS	TRANSPLANT DATE	HARVEST DATE	HARVEST FROM
OKRA	JAMBALAYA, SPINELESS		2 30/100	16-May 55 DAYS		25-Jun
LETTUCE	ROMAINE		1 143/500	16-May 57 DAYS		27-Jun
MIXED GREENS	ARUGULA, PURSLANE		2 80/500	16-May 40 DAYS		30-Jun
HERBS N GREENS	BASIL, SAGE, PARSLEY		1 20/32	16-May 35 DAYS		21-Jun
KALE	DINO, CURLY, RED RUSSIAN		3 70/88	16-May 30-200 DAYS		21-Jun
SPINACH	GREEN		1 75/500	16-May 37 DAYS, 80 DAY		28-Jun
SWISS CHARD	RED N WHITE		3 2/110	16-May 55 DAYS		17-Jun
CALALLOO	GREEN		3 70/120	16-May 60 DAYS		29-Jul
BEETS	REGULAR		2 5/200	16-May 80 DAYS		19-Jul
TOMATOES	CHERRY, BEEFSTAKE		1 34/60	16-May 75 DAYS		02-Sep
CORN	SWEET, WHITE		3 50/60	16-May 85 DAY		15-Sep
CUCUMBERS	SUMTER		1 10/50	16-May 90 DAYS		01-Aug
EGGPLANTS	TRAVIATA		2 9/60	16-May 70 DAYS		26-Jun
CARROTS	RAINBOW		3 500/500	16-May 67 DAYS		29-Jul
MELONS	MUSK		1 3/40	16-May 72 DAYS		12-Jul
CANTALOUPE	EARLY CHAMP		1 5/50	16-May 80 DAYS		16-Sep
PEPPER	SCOTCH, BELL, CHILLI		1 5/40	16-May 87 DAYS		23-Sep
ONION	PURPLE, BROWN		2 2/120	16-May 103 DAYS		06-Nov
YAMS	WHITE, YELLOW		2 4/400	23-May 270 DAYS		20-Nov
GARLIC	REGULAR		1 70/70	16-May 150 DAYS		20-Nov

The initial crop plan for year 2 is found below (Table 24) and initializes various seed testing in the basement green bin greenhouse. The main issue with this crop plan was seeds quality-- there were no germination so production, pricing, sales and profit were affected. The major concern would be relying too much on one form of seeding method and in this case it was relying on direct seeding and not transplanting. There were about 10 Swiss chards that were seeded indoors and transplanted to the Lawrence Heights Community plot, but only two survived up until now due to community farmers damaging the seedlings accidentally. This year just doesn't seem to support potatoes or Swiss chards.

Table 24: Peace Farms 2016 Crop Plan

LOCATIONS AND HARVESTS	LEGEND FOR CROP PLANNING	AUGUST 90 DAYS	SEPTEMBER 120	MAY 0 DAYS	JUNE 30 DAYS	JULY 60 DAYS
COLOR CODED PLOTS	RESULTS OF YEAR 2 SEEDING	LATE START SEASON	CHOOSE SEEDS	SOW SEEDS INDOOR	WRONG KALE	SEED FAILURE
LAWRENCE HEIGHTS BED	1= DIRECT SEEDED	FAILED SEEDS IN MAY	ORDER SEEDS	I.E. TOMATOES	BAD SEEDS	RESEEDING
MALOCA GARDEN BED	2= DONATED	LATE SEASON CROPS	BEGIN SOWING	TRANSPLANT	RESEEDING	BROAD CASTING
BLACK CREEK FARM BED	3= TRANSPLANTED	BRASSICAS	SOW WISELY	COVER FROM FROST	BROAD CASTING	TRANSPLANTING
CROP	VARIETY OF CROP	SEED ORDER CHECK	GERMINATIONS	SEEDED DATE	HARVEST DATE	HARVEST FROM
CARROTS	RAINBOW COLORED	1	41	19-May	67 DAYS	30-Jul
BASIL	GENOVESE	1 & 2	20	19-May	35 DAYS	05-Jun
OKRA	SPIINELESS NECK	1	2	25-Jul	55 DAYS	15-Sep
ONION	PURPLE	2	10	16-May	103 DAYS	06-Nov
KALE	DINO, CURLY, RED RUSSIAN	1 & 2	45	16-May	80 DAYS	21-Aug
GARLIC	WHITE	1	22	19-May	150 DAYS	28-Jun
SWISS CHARD	RED N WHITE	3	5	14-Aug	80 DAYS	14-Nov
CALALLOO	GREEN	1	23	19-May	30 DAYS	19-Jun
TOMATOES	BIZHIKI	1	37	26-May	75 DAYS	20-Aug
SWISS CHARD	RAINBOW	1	10	14-Jun	80 DAYS	15-Sep
PEPPER	RED APPLT	1	11	14-Jun	87 DAYS	03-Sep
EGGPLANTS	BLACK VALENTINE	1	20	26-May	70 DAYS	18-Aug
CORN	SWEET, WHITE	3	60	15-Jun	70 DAYS	15-Sep
CALALLOO	GREEN	1	80	14-Jun	60 DAYS	14-Aug
CUCUMBERS	SUMTER & MARKETMORE	3	26	30-May	56 DAY	01-Aug
BEANS	GREEN	1	11	07-Jun	55 DAYS	09-Aug
WATERMELON	SUGAR MELON	3	26	30-May	80 DAYS	01-Aug
GARLIC	WHITE	1	60	02-Oct	150 DAYS	20-Jun
CANTALOUPE	EARLY CHAMP	1	16	30-May	75 DAYS	12-Sep
BASIL	GENOVESE	3	1	23-May	35 DAYS	10-Jul
ONION	SPANISH RED	2	200	16-May	103 DAYS	06-Nov
PEPPER	SCOTCH BONNET	3	5	23-May	87 DAYS	23-Aug
TOMATOES	CHERRY	3	13	23-May	75 DAYS	10-Aug
EGGPLANTS	BLACK MAGIC	3	5	23-May	70 DAYS	01-Aug
YAMS	WHITE	1	5	16-May	150 DAYS	20-Nov
SWISS CHARD	RAINBOW	1	100	20-May	80 DAYS	29-Jul
CARROTS	RAINBOW	1	300	07-Jun	67 DAYS	23-Aug

The Jamaican Trip (May 9-17)

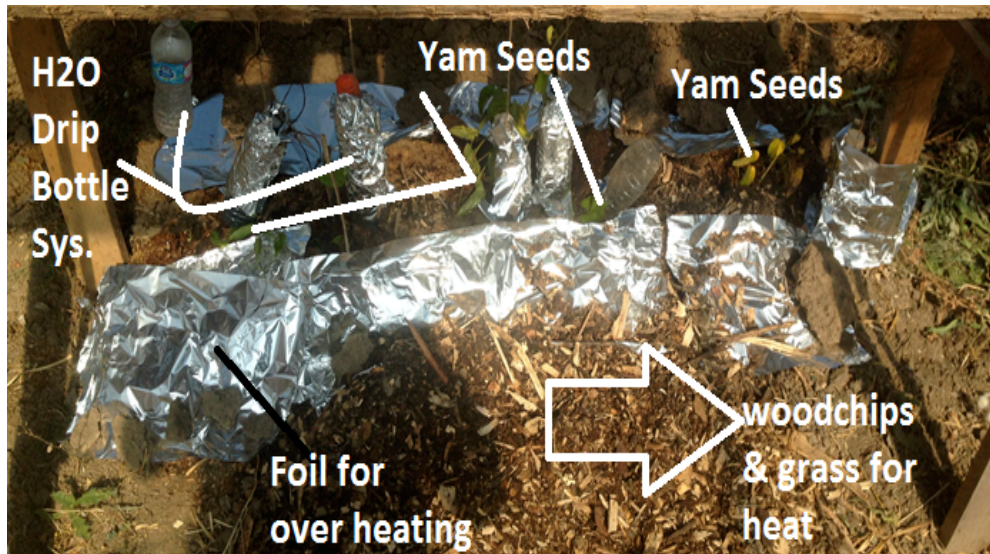
With the intentions to sow yams in Toronto I travelled to Jamaica to buy yams since they are the second largest producers of yams in the world and the nearest and cheapest (Nigeria is the first in production). I informed the Rastafarian Community in Toronto and contacted the University of West Indies (in Mona). The plan was to stay at Mona University but I lost touch with the two professors there once I arrived in Jamaica. I was stuck in Montego Bay and I began to look through the yellow pages where I found a Rural Agricultural Development Agency (RADA). At RADA I couldn't meet the person I needed to sort through the best yams available but they

pointed me to the rural market where they supervised farming training and seeds for the local farmers. The senior executive from RADA said I would need to wash the yams before leaving at the end of the week. So she gave me the telephone number for the Jamaican Airport Security, and they arranged an inspection. The inspection failed because the inspector believed the first wash that I gave the yams were insufficient, mind you I had no idea what the requirements were. Without any real planning I failed to bring back the yams since they were confiscated by airport security in Florida. When I got back home, Black Creek Community Farm was still ongoing and my transplants were safely under the row covers that I had purchased.

The yam experiment was not a complete failure. Lucky enough, an old friend of mine who owns a Ghanaian Restaurant donated five yam seeds to me after he heard my story. (Ghana is the third largest producer in yams after Nigeria and Jamaica). I took those yams and seeded them at Black Creek Community Farms with plans to move them into the greenhouse come November.



Below are the pictures of the greenhouse at Black Creek Community Farms and the yams which are within the greenhouse undergoing cooling treatments due to over heating in the greenhouse. There were five yam heads (yam seeds) in total.



Growing Observations

Seventy kale plants were ordered from Richters Herbs even though the wrong kale was ordered, I transplanted them in May. I supplemented the 70 kales with 100 Swiss chards and callaloo but they failed to germinate. This was the first big mistake of the 2016 season. Only 3 Dinosaur blue kale were left in the greenhouse, intercropped with Black Magic Valentine and some cherry Tomatoes. Kale plants were 24 inches apart and were watered using drip irrigation and rainwater. White row covers were utilized in shielding the newly transplanted crops from the frost.



After 4 weeks of transplant a cherry tomato plant developed a root system on the stem, divided from the original stem root system and thus created a new tomato plant right beside the original cherry tomatoes. The new stem rooted tomatoes developed foliage to resurrect as a plant on its own. Transplantation methods were learned during this winter project through trial and error. The original 10 tomatoes plants were left unharmed as 22 other tomatoes seeds were germinated. In the process 10 tomatoes plants were lost. All transplants work best when they have sufficient soil around them during the transplant and receive sufficient watering post transplanting. The soil should be moist and dark and drainage system should release all extra watering.

Maloca Community Garden

The Maloca Gardens' plot is organized by the Faculty of Environmental Studies at York University and has been my classroom since 2014. This is where all the direct seeding plants were sowed and also the site with the best watering system issues due to the number of community gardeners. The plot sizes were decreased, which offset my seeds, timing and quantity of crops planned in the winter. Without consultation over the break the news of smaller plots was a negative impact to my project. I also had deer problems.



This picture below was taken of the 50by 50 ft plot at Maloca Garden this year. There is white row cover and free standing corn. There is also red calaloo growing wildly. Underneath the white row covers are crops such as 2 surviving Bizhiki tomato seed,s which were meant to be grown to sell only the seeds. Instead of a dozen crops, only 2 successfully germinated.

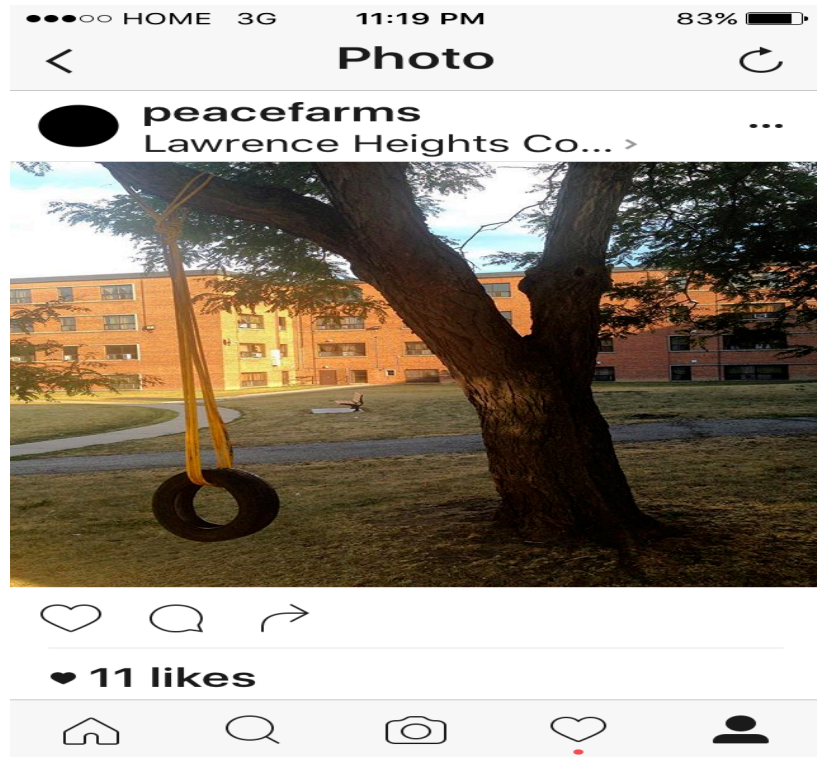


The picture below shows green calaloo and a Bizhiki tomatoe.



Lawrence Heights Community Center

The Lawrence Heights Community Center has many programs geared toward people of all ages who live in the community. After a few meetings I was redirected to the David Wilson Memorial Garden, which was run by two awesome white urban farmers in Jungle. We had common interests such as advertising food security and participating in community development in Jungle. I volunteered, entertained and educated people at the community farm. I took some organic food harvests home some of which I sold and shared.



I also helped them by donating my time and efforts (including resources) to plant and cultivate The Abshir Hassan Community herb garden. The \$2500 development award was used to purchase a new laptop, which replaced the broken old laptop. I also bought necessary support and supplies such as row covers and cutlasses. I used some of the money to travel to Jamaica to purchase yams but was unable to bring the yams through customs. But before we describe the Peace Farms urban project at Lawrence Heights with the David Wilson Memorial Garden and John Polyani High School Garden plots I want to so show some residential innovations that bring community members freshly grown foods using their balconies.



Flemington Park was not farmed in Jungle this year but in previous years community members farmed there.



Community Garden Beds surrounds the apartment complex at 20 Varna in 2016.

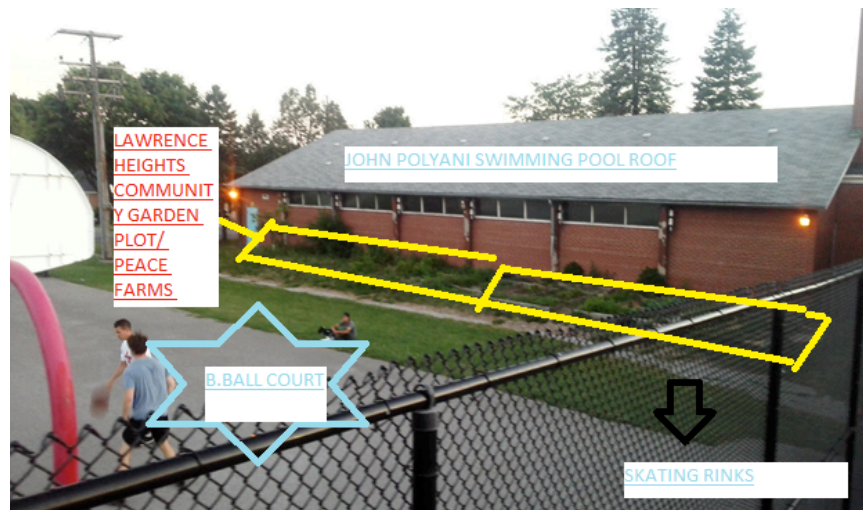


All the plants are grown next to the windows of the first floor apartments around 20 Varna Drive. There are fruits like tomatoes, kale vegetables, and healthy looking bugs.



Abshir Hassan Memorial

Behind the skating rink of the John Polyani highschool is a large community garden then called thn David Wilson Memorial Garden. The organic food bed project was partly dedicated to Abshir Hassan Memorial and I grew basil beds and other herbs.



The extended Abshir Hassan herbs plot contained more than basil (per local request) but also had thyme, chives, peppermint tree, basil, arugula, sage, and camomile to name a few. This plot was visited and harvested by at least 3 different groups of people who helped me tend and sell food from this plot.



As the winter ice thawed in March, I was preparing to transplant my plans outdoors as expected. I cleaned out my room and went to the maintenance coop to report the damages in housing. While there at the office waiting for service two Somali women (whom I call hoyos which is Somali for moms) also came to report fixes required in their unit. I randomly started a conversation with them and found that they were interested in growing and buying basil.



Advertisement and Management

This section borrows research results from authors on advertisement and business management such as Driver (2007), James (2007), Jones (1999) and Kiel (2015). Jones' (1999) book *The Advertising Business* argues that the aim of advertisement is to please customers and find a way of communication that was clear and attractive. Through flyers I communicated the prices, items and contact information. The role of advertising is the same as the goal of marketing "to create, reinforce and grow brand loyalty" (Middleton and Costa, 1997: 97). My produce remained organic and socially responsible. I reevaluated the mission, which was to grow well and share it cheaply until families could afford more. Truths, rights and morality boosted and focused me to engage in new business management skill, web designing and flyer advertisements successfully. According to Kiel (2015: 63), "Character is a unique combination of beliefs, principles, and habits that shape the way we relate to other people and the world around us. The four universal moral principles of integrity, forgiveness, responsibility, and compassion are an extension of

moral intuitions common to all of humanity, but for an integrated person, the expression of those principles becomes a first response in any interaction-in other words, habits.” People generally think that we can feel and empathize with our community. Putting ourselves in other people’s shoes is like customers service acquisition (McGukin, 2001).

This commitment to understand customers makes the salesperson confident and the customer trusting. Doing the right thing (Rogers and Peppers, 2012) is a top priority. Driver’s book (2007) on ethics explores the many types of ethics and their relativity --such as moral universalism, utilitarianism, feminist ethics and moral nihilism, etc. In other words, there are many interpretations of good and bad. We use good and bad to promote socializations and acquire resources from each other. Consistency and frequency of use of products means people trust your product and as far as they are concerned you are safe. A company may pollute unwisely but a customer may choose to not shop from them due to their moral nihilism.

I am thinking of customers as I produce services for them and the pressure to ensure quality and quantity for them. The world of business is building a guiltless interaction and account of customer service activities, which you are rewarded for. As I learn to develop a lasting relationship with customers and organic urban food I am understanding what customers want and what they do not want. Using Driver (2007), I constructed pricing schemes that meant well for the local economic circumstances. I am using my morals to better my community, therefore I am practicing good morals and not just recognizing or covering up social ethics and morals. “Nihilism or lack of moral fact,” writes Driver (2008: 170) sits on the sinful side of the scale in our society. I had at least three ways of compensation for food that I shared and/or traded. The compensations were volunteering, paying, and taste testing Peace Farms produces.

Prototypes and Website

Advertising wars are not wars of the military kind but more of colorful sign boarding and sometimes violent competitions to grab customer attention. There are many forms of advertising used in the popular media for businesses to secure customers. The flyers I created last year were handed out to many people but yielded no response. They also did not prevent the level of competition I survived from Black Creek, African Food Basket and all other food vendors. For example, I lost the vegan Caribbean Restaurant on Weston Road and faced market monopolization from African Food Basket. The flyers displaying new pricing scheme were

distributed widely to customers from the All Nations Church located on Steeles and Norfinch. The flyers below have gotten Peace Farms this far and will be upgraded to catch customers looking for organic food services in Toronto. The flyers are presented below in the order they were created and distributed (they are all featured on the current www.peacefarms.ca website).

Flyer 1 was the very first attempt to attract customers in North York and was distributed to students at York University. It is also the only prototype to host a website tag that can be scanned like a barcode and automatically your phone device will be directed to the peacefarms.ca website.

Flyer 2 was finished in winter with then novice like experience with excel. The pictures were collected from the internet and the banner is from year 2015. The pricing was open and the website was almost a year old.

Flyer 3 is unique in the picturing and symbolism selection of a brand, a price, and business at service. In comparison the pricing meant profit and not discounts for low income families. This approach would resemble the one taken by the African Food Basket at the farmers markets downtown. But many of the seeds failed to germinate.

Peace Farms Flyer 1



**BUY FRESH ORGANIC FOOD. GROW
FOOD IN YOUR BACKYARD WITH
PEACE FARMS.**

**LOCALLY GROWN VEGETABLES,
FRUITS, SPICES, WILD EDIBLE
FOODS AND FLOWERS.**

\$1-\$10 bunches: \$1 bunches have 4 leaves. \$3 bunches have 10 leaves.

Popular crops: Swiss Chard, Kale, Calaloo, Garlic, Carrot, Corn.



**SERVICES
PROVIDED:**

**FRESH ORGANIC
LOCALLY GROWN
FOOD. Delivery
and local farmers
markets in the
GTA.**

**Wild edible
varieties such as
Dandelions and
Purslane.**

**Construct
Backyard Food
Gardens.**

PEACE FARMS
4 CHRISTINA CRESCENT
SCARBOROUGH, ON
M1R4H6

WWW.PEACEFARMS.CA

647-780-0457



Peace Farms Flyer 2



PEACE FARMS FOOOOOOOD	PEACE FARMS FOOOOOOOD	PEACE FARMS FOOOOOOOD	PEACE FARMS FOOOOOOOD
647-780-0457	647-780-0457	647-780-0457	647-780-0457
WWW.PEACEFARMS.CA	WWW.PEACEFARMS.CA	WWW.PEACEFARMS.CA	WWW.PEACEFARMS.CA
\$1-\$50 VEGETABLES	\$1-\$50 VEGETABLES	\$1-\$50 VEGETABLES	\$1-\$50 VEGETABLES
\$1-\$50 FRUITS	\$1-\$50 FRUITS	\$1-\$50 FRUITS	\$1-\$50 FRUITS
\$1-\$50 HERBS	\$1-\$50 HERBS	\$1-\$50 HERBS	\$1-\$50 HERBS
\$1-\$10 EXOTIC FLOWERS	\$1-\$10 EXOTIC FLOWERS	\$1-\$10 EXOTIC FLOWERS	\$1-\$10 EXOTIC FLOWERS
CHEAP ORGANIC FOOD	CHEAP ORGANIC FOOD	CHEAP ORGANIC FOOD	CHEAP ORGANIC FOOD
WELLNESS FOOOOOOD	WELLNESS FOOOOOOD	WELLNESS FOOOOOOD	WELLNESS FOOOOOOD

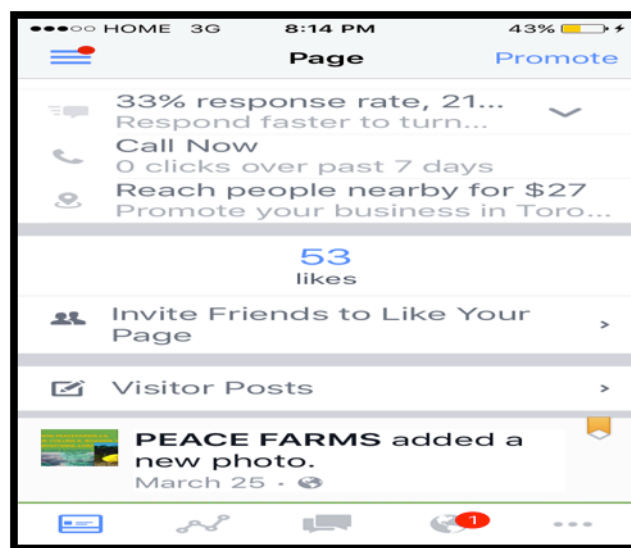
Peace Farms Flyer 3

<p>PEACE FARMS. WWW.PEACEFARMS.CA. OWNER & FARMER: COLLINS K. BOAHEN. 647-780-0457 COLLINSBOAHEN@HOTMAIL.COM PEACEFARMS@TWITTER.COM & FACEBOOK.</p>			
			
CROP VARIETY	QUANTITY	PRICES \$1-\$10	ORGANIC
BASIL-GENOVESE	3 BRANCHES	\$1	Y
BEANS- BLACK VALENTINE	10 PODS	\$2	Y
CALALLOO-GREEN LEAF	12 STICKS	\$5	Y
CANTALOUPE-F1 EARLY CHAMPS	2 FRUITS	\$3	Y
CARROT- HYBRID & RAINBOW	12 STICKS	\$5	Y
CORNFLOWER	3 FLOWERS	\$4	Y
CORN-TRUE GOLD, BLUE AZTEC	10 EARS	\$9	Y
CUCUMBERS- SUMTER & MARKETMORE	3 FRUITS	\$3	Y
ECHINACEA	3 FLOWERS	\$5	Y
EGGPLANTS-BLACK MAGIC	3 FRUITS	\$5	Y
GARLIC-FENDUNI/AFB	3 BULBS	\$5	Y
KALE-BLUE AND CURLY	12 LEAVES	\$3	Y
LETTUCE - GREENS & REDS	3 HEADS	\$3	Y
ONIONS-RED AND WHITE	2 BULBS	\$3	Y
PEPPERS-SCOTCH, BELL, CHILLI	12 FRUITS	\$3	Y
SUNFLOWER	8 FLOWERS	\$5	Y
SWISS CHARD-RAINBOW	12 LEAVES	\$3	Y
TOMATOES-BEEFSTAKE, BIZIKHI, CHERRY	3 FRUITS/20	\$3	Y

Social media activities were also used to raise sales and project partners. They included but were not limited to Peace Farms on Facebook, PeaceFarmsTdot on Twitter, and PeaceFarms on Instagram, Peace Farms on Shopify and more. The goals were to continue posting pictures, and other materials to attract customers. I responded to clients online through email and posts on Facebook websites about foods that have been harvested and community construction projects. But the major goals were creating, editing, formatting and installing good food flyers on the websites.

Online Management

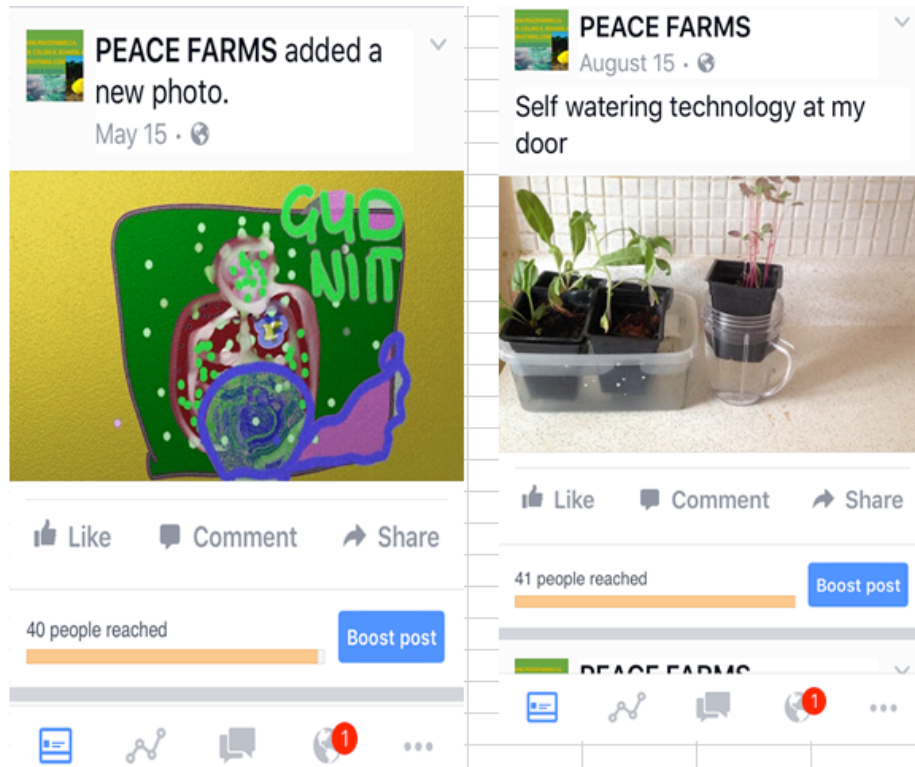
Dealing with clients online is interesting because of the lack of lethargy that comes with industry and managers. Most people left friendly comments and some were rude but most people visited the pages without any nuisance. My former education in CISCO and A+ Computer Certification allows me to be a mobile and ready client of the digital age. Taking pictures and uploading it into the culture of expression and technology is cost efficient.



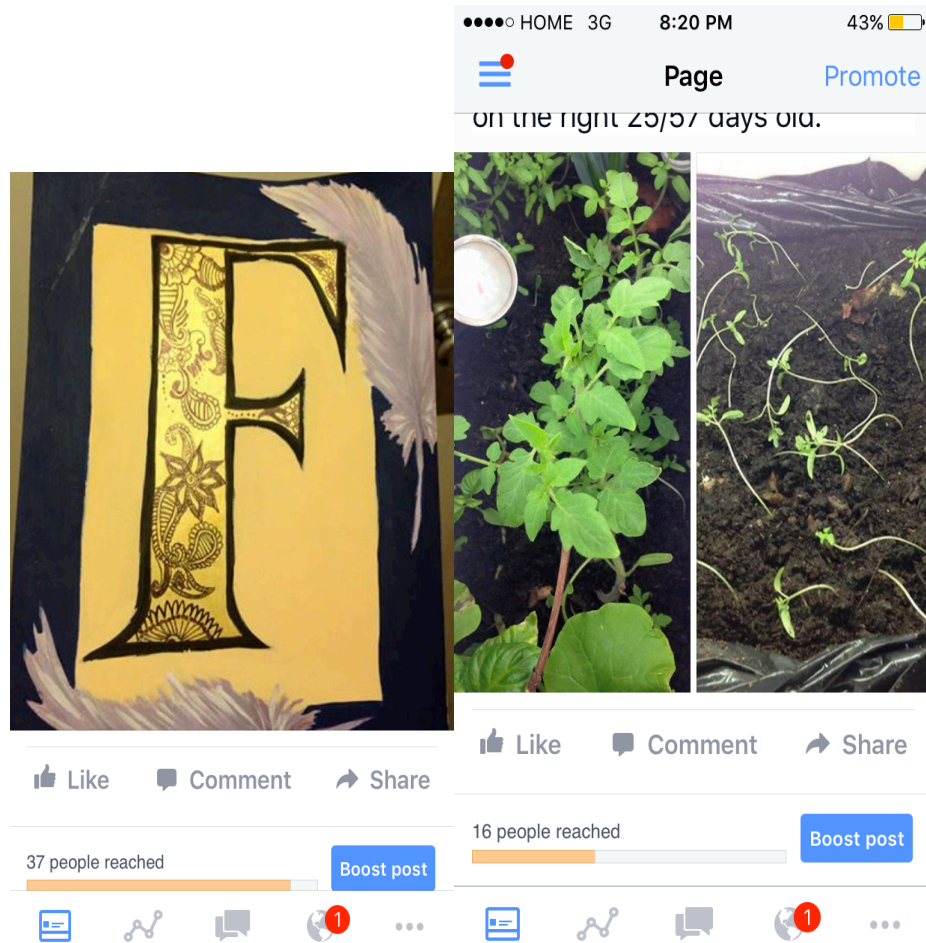
The following images show different posts and responses between flyers with Facebook Likes.



These further examples show Peace Farms reached people too but are not advertising prototypes.



The number of people reached using art and paintings also matter because it attracts like a flyer. Maybe in 2017 I can combine art and information about food. Selling online takes more than likes, there must be big buttons with low prices on the website that is visible and bright. Deals and quick communication about what is being sold has to be added to make shopping and adverts easier. Below is my last example of hype and popularity for webpages on Facebook.



I hired an at-risk student going through family abuse to paint and express her pain as a resident of Lawrence Heights. Her golden F work above was posted on Peace Farms social media sites, including Facebook, PeaceFarmsTdot on Twitter, and PeaceFarms on Instagram and website. The artist is a teenager who attends the John Polyani, a high school on Lawrence and Allen Road in North York. The school's swimming pool shares a wall with my garden project. According to Facebook it costs about \$5 more dollars to boost posts, which is a viable solution in the future. The second photo on the right is from the green bin greenhouse experiment. They are all cherry tomatoes.

Farming Challenges

The 2016 sales were based primarily in Lawrence Heights or Jungle Community, following tensions between Peace Farms, Black Creek Community Farm and African Food Basket. I was kicked out of the farmers markets and my former privileges (transportation and a table at the market to sell goods) as a partner were revoked. Normally, I tagged along with the African Food Basket to sell organic produces but this year I wasn't allowed to due to gatekeeping and super profiteering motives on the side of the organization. My crops were too cheap to sell in comparison to them and they sold everything for \$5 and up. With my seed failures I wasn't able to keep up so I was left out. This issue forced me to look at other customer acquisition methods such as high school friends and York Campus.

Black Creek clash was less severe on Peace Farms but still significant. Black Creek contracted with a former client, a vegan restaurant, therefore chasing me out of the opportunity to sell the same organic goods. The restaurant bought calaloo and contributed to the 48 bunches sold last year in Toronto.

In Lawrence Heights community I sold to 5 customers at least twice and there have been zero consequences so far. Because I live in the neighbourhood, I have also allowed a debt system where customers take the food and pay later. There was no such thing in 2015. But my \$300 sale this year was not only in Lawrence Heights – I always owe it to my grandmother's church, the All Nations Church, located near Steeles and Norfinch minutes away from Black Creek Community Farms. The church shopped and bought vegetables with promises to continue shopping from me.

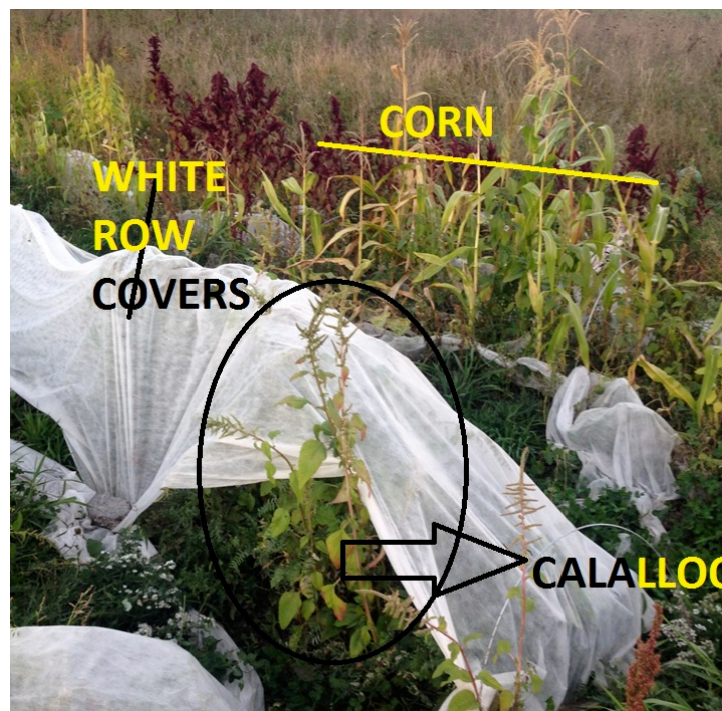
There were additional problems. For the second year in a row I mismanaged weeding techniques and as a result lost space on the farm. In the picture are three sticks planted into the ground, there are two longer sticks on the left and a short stick on the right. Behind those sticks, which were used to stake yams (transferred into the greenhouse after germination) is a bush. The bush is made up quack grass, thistle, red onions, Swiss chard, and calaloo. Lack of weeding has left the space looking unmanageable.



In the coming years I will have to lay weed covers (black plastic) instead of relying on my white row covers still visible in the weeds. The problem was using the wrong material to suppress weeds. It is hard to believe that little weeds can turn into a forest but after two years of choosing wrong weeding methods I know more. Continuous weeding does not help and that was my attempt last year. Gathering from the crop planning books such as Tozer (2009) you can also grow crops in all the space available to make that space unusable.



In May, Maloca students conducted a field survey to get the season started. It was estimated that a new fence was needed to protect the plots from people, deers and rodents. The existing fence had been broken down in many places and the wood used to uphold the fence was drying up and losing its efficiency after one year in the ground. Though this work had to be done we could not finance the repairs nor organize well enough to get this important task done. So later during the year I had deer visitors. The white row covers were used to keep the crops under cover from the deer. Most things, and in particular green beans, were not severely attacked. However, upon my return from Jamaica to purchase yams (part of my culturally specific food approach to food security), we had run out of time to complete the fencing in 2016. I therefore ran the risk of farming while deers, rabbits, and groundhogs ran around hungry. On Thursday June 30, the deer removed my row covers and ate my vegetables –or at least, this is what I suspect.



Seed failure is something that is regrettable but also a valuable lesson for young farmers to double check the potency of seed germination capacity. I also learned to diversify

seeding techniques for larger plans. I direct seeded everything on my crop list and so when that direct seeding technique failed so did the crops. Earlier I spoke about debt caused by running businesses and using diversity to raise profits. I contacted the Toronto Seed Library and Everdale Environmental Learning Center to acquire a contract to grow seeds for money (Everdale seed program) and donation (Toronto seed library). Everdale gave me the start-up seeds for black valentine beans and bizhiki tomatoes to start with, bringing in \$300. Both beans and tomatoes variety were directly sowed because of mistake in guidance from Everdale (beans preferred direct seeding). So when the direct seeding issue arose it meant bad news for Everdale, Peace Farms and paying customers.

The lack of volunteers this year has made my work tardy. Building a fence together is wise trying to do it alone isn't. Maloca farming is best when it is populated with members of the community and students. I was able to recruit a few but not sustainably as everyone was just super busy this year. Additionally hot temperatures this summer complicated growing as well.

Developing Opportunities

The first plan to fix marketing issues is called the Foodies Student Club at York University. This part includes medicine through meditation to ease the energies applied during farming on ourselves and tools. It will promote art, care and sharing of food. This mini-project is able to adapt to marketing circumstances and circumvent a sample to focus on changing diets through Peace Farms. They can also pick up organic food from the club office and learn how to grow food together. There are other green club initiatives on campus that can be cohosted to fund and organize large food security conferences. The club will promote information on nutritional diets for example and feature trips to Black Creek Community Farm and Maloca Gardens to harvest organic food to eat.



I am still completing the final stages of registering Foodies at York University. This project will be the first part of marketing plan based on the events that occurred in 2016.

The second plan to enhance sales is called 'Mobilizing Sales' program. This is meant to enhance youth internship and food delivery programs in Jungle, Lawrence Heights through a biking system (also beneficial for one's health) in 2017. The picture shows the type of bicycles with large baskets attached at the backs. Youths can ride and sell food using this bike and access to food for mothers and the disabled will be enabled through this organic food system.



Conclusion

In conclusion, food farming is a demanding and challenging journey. Overall, \$800 were made in profits in 2016 with almost \$4000 spent over the last two years totalling an \$8000 project on sheet. I learned a lot about soil testing and micro business financing. I learned about receipts, banking in general and researching through fieldwork. I also learned about engaging in small business operations and about busy market schedules in operations that may or may not ever go down successfully. I learned by doing, by success and failures and through books. For the most part I followed organic growing practices and networks. Prices were kept low this year and business has been scheduled to continue growing wisely. I grew less food this year but learning grew and will continue to grow successfully.

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